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ABBREVIATIONS

CEPII	Centre d' Etudes et de Perspectives Industrielles Internationales
CERN	Organisation Européenne pour la Recherche Nucléaire
CIP	Competitiveness and Innovation Program
DG COMP	Directorate-General for Competition of the European Commission
DG REGIO	Directorate-General for Regional Policy of the European Commission
EMBO	European Molecular Biology Organization
IMD	International Institute of Management Development
JEREMIE	Joint European Resources for Micro-to-Medium Enterprises
LNG	Liquified Natural Gas
TEN	Trans – European Networks
UNCTAD	United Nations Conference on Trade and Development
WEF	World Economic Forum
WTO	World Trade Organization
GVA	Gross Value Added
GERD	Gross Domestic Expenditure on RTD
GDP	Gross Domestic Product
AMEA	Disabled persons
RES	Renewable Energy Sources
GRP	Gross Regional Product
GSRT	General Secretariat for Research and Technology
DEKO	Utilities Companies
DEPA	Public Gas Corporation
HTSO	Hellenic Transmission System Operator
GNT0	Greek National Tourism Organisation
AIS	Annual Industrial Survey (ESYE)

EAFRD	European Agricultural Fund for Rural Development
EU	European Union
ELKE	Greek Investment Centre
GPC	Gas Provision Company
EPAN	Operational Programme 'Competitiveness' 2000-2006
ESEE	National Confederation of Hellenic Commerce
NSRF	National Strategic Reference Framework
ESYE	National Statistical Service of Greece
RTD	Research and Technological Development
EFF	European Fisheries Fund
RTDI	Research, Technological Development and Innovation
IOBE	Foundation for Economic & Industrial Research
CAP	Common Agricultural Policy
KETA	Centre of Entrepreneurial and Technological Development
IS	Information Society
CSG	Community Strategic Guidelines
IRC	Investor Reception Centre
HVC	High Voltage Centre
PPP	Purchasing Power Parities
SME	Small & Medium-sized Enterprises
NMS	New Member States
DFI	Direct Foreign Investments
OLP	Piraeus Port Authority
HEPO	Hellenic Foreign Trade Board
BSEC	Black Sea Economic Cooperation
OSPAN	'Competitiveness and Entrepreneurship' Programme Planning Team
ME	Micro-Enterprises

SETE	Association of Greek Tourism Enterprises
TEMPME	Guarantee Fund for Small and Very Small Enterprises
ICT	Information and Communication Technologies
S/S	Substations
SGEIs	Services of General Economic Interest
YPAN	Ministry of Development
YPOIO	Ministry of Economy & Finance

INTRODUCTION

The Operational Programme Competitiveness and Entrepreneurship details the strategy for enhancing the competitiveness and extrovert entrepreneurship of the Greek economy in the context of the broader national development strategy for the new period 2007-2013.

It is estimated that the strategy adopted and the means of intervention defined in the Programme will have a positive impact on the competitiveness, extroversion and entrepreneurship in Greece and will ensure positive results for the whole of Greek economy, as far as development goes.

The strategy pertains to the sectors of manufacturing-processing, services, commerce, consumer protection, research – technology, energy, tourism and culture. It covers therefore the fields of competence of the Ministry of Development, the Ministry of Tourism and the Ministry of Culture.

The drafting of the Programme followed a long and difficult procedure in the framework of the Programme Design Group and demanded a series of consultations both among the Ministries and General Secretariats responsible for tracing and implementing the policies in each sector, and among the agencies and bodies involved and the broader public.

Due to the special provisions for the Regions of "transitional support" (Attica, Southern Aegean, Sterea Ellada, Western Macedonia and Central Macedonia), the Programme covers these Regions on the strategic level, but not on the financial: that is, the funds available to the Programme can be invested only in the 8 Objective 1, 'Convergence', regions. Therefore, the amounts from the Structural Funds available for competitiveness appear reduced, but to these one must be add the funds of the five regions of transitional support which will be directed to Competitiveness actions.

The geographical intervention areas of the Operational Programme Competitiveness and Entrepreneurship correspond to the following NUTS codes.

GR 11	EASTERN MACEDONIA - THRACE
GR 14	THESSALY
GR 21	EPIRUS
GR 22	IONIAN ISLANDS
GR 23	WESTERN GREECE
GR 25	PELOPONNESE
GR 41	NORTHERN AEGEAN
GR 43	CRETE
GR	GREECE

1. ANALYSIS OF EXISTING CONDITIONS

1.1. OVERALL COMPETITIVENESS AND THE PROGRAMME SECTORS

Recently we identified positive developments in the competitiveness of the Greek economy¹: the IMD 2006 Yearbook on competitiveness indicates a reversal of long – term trends, and Greece seems to be improving its place in the overall international ranking, in the wake of a five year decline. To be more specific, in 2005 Greece ranked 50th, in 2006 42nd among 61 countries and regions, rising above countries like Portugal, Turkey and South Africa, and recording the third best overall improvement after China and India. In its ranking among European, Middle Eastern and African countries, Greece climbed six places (to the 25th place among 37 countries). As regards the 21 of 25 EU countries that participated in that survey, Greece improved its position and is now ahead of countries such as Portugal, Italy, Slovenia and Poland. The World Economic Forum 2006 report places Greece in the same position as in 2005 (number 47 overall) but notes that eight new countries have been added to the competitiveness analysis.

In its *Annual Report on Competitiveness for 2003* the Greek National Council for Competitiveness and Development defines competitiveness as the ability to maintain and improve the living standard, upgrade the business environment, reinforce employment, real cohesion, and environmental protection and enhancement, and keep improving productivity in globalized conditions. The competitiveness of an economy depends on a host of determining factors, such as improving the macro-economic environment, the capacity of interconnecting and economically integrating Greece into the globalized markets and international integrated business networks, supporting high and constantly increasing productivity; higher competitiveness leads to the achievement of the objective goal of assuring a high living standard (revenue, jobs, upgraded environment, life quality, prospects).

Considering this definition, in view of the particular structure of the NSRF (National Strategy Reference Framework) for 2007-2013 and due to the fact that the co-financed intervention (as was the case in previous programming periods) is only a single component of the overall effort toward competitiveness (outweighed by private and public investments that are not co-financed, and by parallel policies), the new Operational Programme is called upon to function as a catalyst for crucial challenges and to address weaknesses and problems in specific economic sectors, rather than cover all weaknesses and all problems regarding the competitiveness of the Greek economy, which are characterized by the following indicators:

¹ International Institute for Management Development (IMD), *World Competitiveness Yearbook* 2006.

TABLE 1: STRUCTURAL INDICATORS

		year
Per capita GDP in Purchase Power Standard [PPS] (EU-25=100)	82.0	2005
Labour productivity per worker (EU-25=100)	98.4	2005
Percentage of overall employment (%) (EU-25=63.8)	60.1	2005
Percentage of overall unemployment (%) (EU-25=8.8)	9.8	2005
Percentage of older persons employed (%) (EU-25=42.5)	41.6	2005
Educational level of 20-24 year olds having completed secondary education (%) (EU-25=77.5)	84.1	2005
Percentage participation in lifelong learning (%) (EU-25=10.2)	1.9	2005
Research and Development expenditure (as % of GDP) (EU-25=1.86)	0.61	2004
Energy intensity of the Greek economy (EU-25=100)	117.3	2004
Value of merchandise shipped (as % of GDP) (EU-25= 28.5)	8.0	2005
Percentage of population at risk of poverty after social transfers (%) (EU-25=16)	20	2004
Business investments (Gross fixed capital formation in the private sector, as % GDP, EU-25=17.4)	20.2	2005

Source: Eurostat

In order to accomplish a brief and easily graspable presentation of the Programme, Appendix 1 includes a special analysis per policy sector. The Programme covers the entire secondary sector of the economy, not including construction, and the tertiary sector not including real estate management, public administration and defence, education, household personnel, and particular activities under transport and warehousing, and financial organizations.

The importance of those sectors for the Greek economy is demonstrated by the figures below:

TABLE 2: PERCENTAGE SHARE IN EMPLOYMENT AND GROSS ADDED VALUE BY ECONOMIC SECTOR

Employment	1998	2001	2004	2005
PRIMARY SECTOR	18.0	16.1	12.6	12.4
SECONDARY SECTOR	23.3	23.0	22.4	22.4
Mines and quarries	0.5	0.5	0.3	0.4
Manufacturing and processing	14.5	14.1	13.1	12.8
Electricity, natural gas,	0.9	0.9	0.9	0.9
Construction	7.4	7.5	8.1	8.3
TERTIARY SECTOR	58.7	60.9	65.0	65.2
Commerce, wholesale and retail ...	16.8	17.2	17.5	17.8
Hotels and restaurants	6.2	6.6	6.4	6.8
Transport, warehousing ...	6.1	6.3	6.2	6.2
Finance organizations	2.3	2.6	2.6	2.6
Other	27.3	28.2	32.3	32.3
Gross Value Added	2000	2001	2004	2005
PRIMARY SECTOR	5.4	5.3	4.2	3.9
SECONDARY SECTOR	20.0	20.9	19.5	18.7
Mines and quarries	0.4	0.4	0.4	0.3
Manufacturing and processing	9.8	9.9	8.6	9.2
Electricity, natural gas,	2.0	2.3	2.2	2.1
Construction	7.8	8.3	8.3	7.0
TERTIARY SECTOR	69.1	68.5	72.1	73.6
Commerce, wholesale and retail ...	11.7	12.0	12.3	13.0
Hotels and restaurants	8.7	9.4	9.6	9.9
Transport, warehousing ...	8.0	7.0	8.4	8.0
Finance organizations	5.1	4.1	3.6	4.0
Other	35.7	36.0	38.1	38.7

Source : National Statistical Service of Greece

The Operational Programme is called upon to intervene in sectors that employ 2 / 3 of the human resources of Greece, a figure that has been rising steadily (64.65% in 1998; 67.55% in 2005). These same sectors generate over 45% of the total domestic Gross Value Added, which has been rising as well (45.7% in 1998 – 46.6% in 2004). We can already identify another significant parameter, the discrepancy between the percentage share in employment versus that in the Gross Value Added, which could be explained in terms of the lower productivity evident in the tertiary sector.

A specific analysis of secondary sector activities will allow us to identify certain trends that produce very significant consequences:

TABLE 3: GROSS VALUE ADDED BY SECONDARY SECTOR ACTIVITY (STANDARD VALUES, %)

	1999	2000	2001	2002	Overall increase	Change
MINES	1.7	2.0	2.2	1.8	35.3%	+ 8%
MANUFACTURING PROCESSING	-68.7	68.8	67.5	67.7	23.5%	-1.4%
ENERGY	6.4	5.7	5.4	5.5	7.0%	-14.6%
CONSTRUCTION	23.2	23.5	24.9	25.0	35.0%	+ 7.8%
TOTAL					25.28%	

Source: National Statistical Service of Greece

The share of manufacturing – processing in the Gross Value Added has declined steadily, while that of construction has gradually risen. The activities that are expected to develop competitive advantages and where competitive threats are particularly significant, show a decline of Gross Value Added.

A comparison between the Greek situation and the corresponding EU-25 yields the following values:

TABLE 4: G.D.P. and G.V.A., GREECE and EU-25

	1995	1999	2003
Share of the total Greek GDP (million €) in the EU-25 total	1.3%	1.6%	1.7%
G.V.A. composition: Primary Sector share (where the average EU-25=100)	347.7	331.9	316.9
Secondary Sector share (where the average EU-25=100)	74.8	76.4	84.3
Tertiary Sector share (where the average EU-25=100)	101.1	102.1	100.0
Total Secondary Sector G.V.A. in million € as a percentage of the EU-25 total	0.9%	1.0%	1.0%

Source: EUROSTAT, proprietary processing for available years

This shows that the total Greek figures (GDP and secondary sector value added) are very small compared to the total EU figures, and therefore the potential contribution of Greece toward European goals and its ability to resist outside influences is correspondingly small, while at the same time the Greek G.V.A. composition is essentially different from the EU average, so that simple reproduction of general guidelines and good practices may be sufficient.

1.2. CRUCIAL ISSUES REGARDING THE COMPETITIVE POTENTIAL OF THE GREEK ECONOMY

Despite the recent improvement, certain structural problems of the Greek economy, of historic origin, seem to continue obstructing the action of positive factors. As a result, the current positive course could not by itself guarantee steady high competitiveness in the long run. An analysis focusing on each sector has brought to light the issues that follow, which are crucial for the economic competitiveness of Greece.

Full documentation of these issues is provided in the analysis for each sector.

1.2.1. Competitiveness and Extroversion

In addition to the ranking indicators employed by international organizations, other safe indicators for competitiveness are: the ratio of exports to imports; import penetration; and extroversion (exports as a % of the GDP). The Greek economy has traditionally been characterized by a low exports to imports ratio, due to structural weaknesses, the composition of the production fabric, and constantly high investment needs. Yet that index has marked a steady long-term decline with particularly negative figures concerning trade with the EU-15 partners². After 1989, losses in intra-EU trade were partly offset by profits from trade with South-Eastern European countries, but that trend has started to decline because exports to those countries have been supplanted by the direct flow of investment capital³, whose positive secondary effects (stronger Greek businesses and a general shift to “higher” value business activities) have yet to become visible. In addition, the Greek trade deficit has traditionally been set off by revenue inflows from abroad (in 1950 – 1980 by foreign exchange from tourism, Greek emigrants’ remittances, and foreign exchange from shipping; after 1990: revenues from tourism and shipping, support from Structural Funds). Concerning the penetration of imports, the “physical” obstacles to competition which prevail in construction, tourism and personal services, the extra – national character of shipping, and the protectionist framework still prevailing in agriculture and energy, import penetration is obvious mostly in manufacturing – processing, where it has increased by 50% in the 1988 – 2000 period⁴.

² The exports / imports ratio in Greek trade with EU – 15 countries dropped from 48% to 30% between years 1989 and 2003. Bank of Greece data, Statistical Bulletins of Economic Conjuncture series.

³ See related commentary in: Ministry of Economics and Finance, Noisis SA, *Thematic Survey: Competitiveness*, 2006.

⁴ From 34% of the Greek domestic market in 1988 to 51% in 2000. Source: Ministry of Development, National Council for Competitiveness and Development, Applied research for the elaboration of indicators to monitor the exporting performance of Greece: Documentation and recommendations, Institute for Export Research of the Exporters’ Association of Northern Greece, 2004.

TABLE 5: COMPARATIVE DATA ON THE COMPETITIVENESS OF GREECE AND NEW E.U. MEMBER STATES

	Foreign Direct Investment 2000-4	Exports as % of imports, 2004	Exports as % of GDP, 2004	Countries ranked according to the Lisbon competitiveness indexes						Overall WEF rank, 2004	Overall IMD rank, 2004
				Information Society	Innovation, R&D	Market deregulation	Business networks	Financial Ser-vices	Business Environment		
Estonia	3,030	72	54	8	15	15	17	11	7	24	25
Latvia	1,745	70	30	18	14	13	23	18	8	44	> 51
Lithuania	2,509	64	42	20	17	16	21	21	14	39	> 51
Malta	1,170	82	50	11	24	20	19	13	18	42	> 51
Hungary	16,022	99	55	22	19	17	20	17	13	46	35
Poland	29,470	101	33	24	18	24	25	23	26	71	48
Slovakia	9,394	101	68	21	23	23	22	22	27	41	33
Slovenia	3,045	91	49	12	12	19	14	20	23	35	38
Czech R.	25,675	94	62	19	22	21	15	24	17	38	36
Greece	4,759	30	8	23	21	22	16	19	22	51	37

Sources: UNCTAD, Eurostat and Greek Ministry of Development – Special Secretariat for Development 2005, Examination of International Competitive Indicators, data processed by authors

The figures in this Table indicate that the problem of Greek economic competitiveness is general on one hand, yet it seems particularly acute at intra-EU level: that is where for about twenty years most losses have occurred, in the external or the internal market. As a result, the latest EU enlargement to include the new member-states in central and eastern Europe is an important issue for Greek competitiveness: these are economies that attract FDI (foreign direct investments) twenty times larger than Greece, that are many times more extroverted than Greece, that have a surplus or more positive trade balance, and therefore record a much higher performance than Greece in several Lisbon indexes, making them more attractive for incorporation in the common European strategies⁵.

The unfavourable position of Greece may be explained in terms of specific advantages available in the new member-states: lower production cost in labour-intensive or “traditional” activities (as is the case for many Greek activities), smaller distance to the large EU markets that allows them to operate as “export bases”, special expansion strategies pursued by large international corporations⁶, support by public policies that are far less restrictive than the ones implemented in Greece in the period of its accession to the Eurozone, low cost availability of highly trained – educated labour. These conditions, favourable for new member states, may be attenuated to the degree that competition outside the EU may be intensified and strike those economies, due to the sectoral composition of their industry⁷, but such

⁵ See detailed analysis in: Ministry of Development, BCS - Remaco, First Report of the Operational Programme for Competitiveness, 2000-06, pp. 237 – 240.

⁶ E.g., defensive expansion in the immediate vicinity to cut costs in anticipation of sharper competition with regions offering even lower costs.

⁷ See EU, Report on European Competitiveness, 2004, Summary, Ministry of Development.

external competition is bound to also act on Greece with its similar productive structure, while new EU member states will probably have an easier time with such difficulties due to higher inflows from the Structural Funds.

In tourism, Greece has certain advantages over the new EU member states and the candidate countries (in 2004 revenues from the export of services were more than double those from the export of goods), but it couldn't depend long term on the exploitation of circumstantial favourable margins of international demand occurring at times (such as for example the Athens 2004 Olympics, the recent general international recovery that favoured traditional travel destinations, the shift of demand toward safer destinations), in view of the fact that the Greek tourist product is not sufficiently differentiated in terms of quality and thematic variety, cost is dominant in the tourism sector, and international tour operators are always in a strong position to manipulate demand.

Culture constitutes a comparative advantage, as it contributes to the development of high per capita value, special and thematic forms of tourism, and forms that contribute to lengthen the tourism season. Thus it contributes to improve the attractiveness of the country as a whole, as well as of its regions and cities, by protecting and promoting cultural heritage, which is directly associated with the conservation of both natural and man-made environment, and by developing modern culture.

As far as the new EU member states are concerned, recently acceding countries (Bulgaria and Romania) and Turkey, do not pose a direct "threat" to the competitiveness of the Greek economy: the Greek GDP is greater than the summed GDP of all Balkan countries, while the Greek secondary sector produces as much as Romania, Croatia and Bulgaria. It is expected that Turkey will probably become a significant competitor in the future, with a very sizable secondary sector that is in many ways quite similar to the Greek one.

TABLE 6: COMPARATIVE INDICATORS of GREECE and the BALKAN COUNTRIES

	GDP 2002 (USD million)	% change 1991- 2003	Secondary sector as % of total GDP	% change 1991- 2003	Exports (USD million) 2002	Imports (USD million) 2002	Foreign Direct Investment Reserve (USD million) 2002	Foreign Direct Investment Reserve, % of total
Greece	6,124	442.8	0.9	-60.6	330	1,485	988	0.9
Bulgaria	19,859	81.4	3.9	-46.5	7,445	9,923	6,029	5.9
FYROM	4,705	139.3	1.1	-15.6	1,358	2,324	907	0.9
Bosnia	6,963	-19.6	1.6	...	1,272	3,890	828	0.8
Serbia w. Montenegro	19,176	-76.7	4.6	...	3,011	7,809	1,959	1.9
Romania	60,358	109.2	17.1	-24.2	17,618	23,983	22,563	22.0
Croatia	28,322	54.4	6.2	-14.4	6,007	13,469	38,450	37.7
Total of Balkan countries	145,507	-4.4	35.4	-27.0	37,041	62,883	71,724	70.1
Turkey	237,972	-10.4	39.0	-27.0	51,206	69,340	18,558	18.1
Greece	153,042	71.8	25.6	-20.0	13,040	45,379	12,056	11.8

World Bank data: Ministry of Macedonia & Thrace, 2005, Strategic Plan Development plan for Northern Greece

Extroversion varies depending on sector and type of business activity: the exports over imports ratio is in the range of 20 to 40% in 9 divisions of the Greek secondary sector, above 40% in three divisions, and under 20% in all the rest. Yet of the 12 divisions of manufacturing – processing that have a relatively high degree of extroversion, showing that their products are adequately competitive or very competitive in the international marketplaces, only three (divisions) have a significant share (over 10%) in the total Greek exports⁸. On the other hand, 10 large Greek corporations realize 47% of their turnover and 42% of their profits outside Greece⁹.

As far as the evolution of Greek exporting performance is concerned, we can see that after a significant decline in 2001 and 2002, Greek exports have been rising steadily in recent years, improving the exports-to-imports ratio, which nevertheless is still quite low (32.8% in 2006). The growth rates of Greek export trade during the last decade have been leaner than the corresponding rates prevailing worldwide as well as among European countries, resulting in a gradual shrinking of the Greek share in that aspect of international trade. Greek exports still have large margins for geographical differentiation, considering that 62.8% of exports go to the ten largest markets.

In the period 1995 to 2005, Greek exports of commercial services, which include tourist expenses, transport services (by sea, air etc.) and various other services produced by Greek businesses and purchased by foreigners (banking, construction, consulting, communications services, etc.) marked an average annual increase of 13.6% compared with a mere 7.4% worldwide and 7.6% for Europe as a whole, offsetting the picture of stagnation observed in trade exports.

⁸ Institute for Export Research of the Exporters' Association of Northern Greece, op.cit.

⁹ E.g. Coca-Cola Hellenic Bottling Company by 85% and 84% respectively, Chipita by 70% and 70%, Titan by 63% and 43%, National Bank by 16% and 22%, Bank of Piraeus by 14% and 14%. Source: KATHIMERINI Athens daily newspaper, 15 May 2006.

Even to this day Greece maintains a significant percentage of dependence on the exports of agricultural products, although the largest share of Greek exports involves manufactured products, which in 2006 covered 57.9% of all exports. Most Greek exports are directed to Central and Eastern European countries.

The overall increase of the manufactured products' share in exports conceals a large number of shifts among product categories. Clothing and footwear exports have declined, while the exports of chemical products and transport equipment and materials appear particularly vigorous. Other categories marking significant growth are chemicals, pharmaceuticals, machinery and equipment, and communications devices.

TABLE 7: OVERALL TRADE BALANCE OF GREECE, 1999-2006

YEAR	IMPORTS			EXPORTS			BALANCE	
	TONNES	THOUSAND EURO	% CHANGE	TONNES	THOUSAND EURO	% CHANGE	TONNES	THOUSAND EURO
1999	33,931,181	28,659,182		22,259,424	10,391,495		-11,671,758	-18,267,687
2000	44,269,132	36,260,833	26.52%	24,412,684	12,725,976	22.47%	-19,856,448	-23,534,857
2001	68,338,647	31,812,854	-12.27%	23,570,787	11,629,194	-8.62%	-44,767,860	-20,183,659
2002	44,686,218	33,062,360	3.93%	17,736,154	10,945,615	-5.88%	-26,950,064	-22,116,745
2003	50,272,175	40,299,535	21.89%	18,209,496	12,007,084	9.7%	-32,062,679	-28,292,452
2004	50,571,995	42,391,946	5.19%	18,420,552	12,343,674	2.8%	-32,151,444	-30,048,272
2005	50,534,286	44,071,868	3.96%	31,964,390	14,050,468	13.83%	-18,569,896	-30,021,400
2006	51,586,058	50,665,551	14.96%	21,452,242	16,603,550	18.17%	-30,133,816	-34,062,002

Source: Hellenic Foreign Trade Board, Statistics Department.

As far as the domestic regional distribution of exporting activities is concerned, the five (5) transitional regions of Greece are clearly in a superior position in terms of exports to EU countries, also reflecting the overall lag in production of the eight convergence regions, in spite of the improved position of the latter in the exports of agricultural products to countries outside the EU.

TABLE 8: EXPORTS FROM THE REGIONS OF GREECE TO E.U. AND NON-E.U. COUNTRIES, YEAR 2006

REGIONAL DISTRIBUTION	EXPORTS TO EU COUNTRIES 2006			EXPORTS TO COUNTRIES OUTSIDE THE EU		
	Quantity (kg)	Value in EUR	%	Quantity (kg)	Value in EUR	%
TOTAL GREEK EXPORTS	21,452,242,000	16,603,550,000	100.0	21,452,242,000	16,603,550,000	100.0
TOTAL SUM	8,728,565,071	8,914,640,887	53.7	12,748,400,290	7,737,021,408	46.6
TOTAL OF THE FIVE TRANSITIONAL REGIONS	7,416,907,960	7,179,493,435	43.2	7,616,571,975	5,266,968,557	31.7
REGION OF ATTICA	6,348,532,890	5,179,754,634	31.2	2,429,985,987	2,234,843,531	13.46
REGION OF CENTRAL MACEDONIA	938,921,564	1,660,587,234	10.0	2,271,663,469	1,791,187,944	10.79
REGION OF WESTERN MACEDONIA	8,306,349	86,043,671	0.5	302,451,795	260,042,582	1.57
REGION OF SOUTHERN AEGEAN	8,265,162	8,004,806	0.0	1,017,358,073	242,356,307	1.46
REGION OF STEREA HELLAS	112,881,995	245,103,090	1.5	1,595,112,651	738,538,193	4.45
TOTAL OF THE EIGHT CONVERGENCE REGIONS	1,274,479,374	1,603,631,799	9.66	5,131,828,315	2,470,052,851	14.88
REGION OF NORTHERN AEGEAN	30,458,329	103,151,793	0.62	1,903,813	11,573,703	0.07
REGION OF THE PELOPONNESE	241,234,711	320,690,974	1.93	2,784,417,186	1,283,104,833	7.73
REGION OF WESTERN GREECE	204,770,081	193,781,432	1.17	380,529,052	132,839,568	0.80
REGION OF EASTERN MACEDONIA & THRACE	321,138,159	306,267,324	1.84	743,779,640	367,118,236	2.21
REGION OF CRETE	202,699,585	296,139,500	1.78	174,034,544	66,216,224	0.40
REGION OF THESSALY	238,362,750	313,678,726	1.89	853,713,429	531,055,727	3.20
REGION OF IONIAN ISLANDS	3,333,814	14,615,259	0.09	54,536,891	4,839,763	0.03
REGION OF EPIRUS	32,481,945	55,306,791	0.33	138,913,760	73,304,797	0.44

Source: Hellenic Foreign Trade Board, Statistics Department, processed data

1.2.2. Competitiveness and Productivity

The combination of low extroversion, high trade deficit and high penetration of imports, indicates the profile of an economy unable to cope with competition, focusing on economic activities that are beyond competition or that contribute very little to its international competitive standing, producing less than half of what it consumes, whose development is driven by domestic demand¹ and supported by the inflow of funds from outside the country. That profile could be viable provided that the inflow of outside funds is due to other overall parameters of competitiveness². The problem is centred on (a) the consideration that the inflow of external funds is a factor that contributes to a higher GDP and living standard but does not by itself guarantee long term development stability, since a large part of the induced supply trickles away to other countries, both EU members and non-members³ and (b) to the fact that external funds are not guaranteed in the long term: Structural Fund contributions are being reduced, competition in tourism is on the rise, shipping is inherently “de-nationalised”, and the financial services sector is subject to short-term disruptions. Obviously, it would be good to maintain a strong domestic production base. In the most recent period, investments in Greece have been on the rise, and productivity is rising at a high rate, but Value Added is only rising minimally, while technological upgrading is neither vigorous nor self-sustaining⁴. The rate of increase is actually second highest within the EU after Ireland, and the average living standard is rising, but the production fabric seems to be weakening.

TABLE 9: SELECTED GREEK ECONOMIC INDICATORS, 1989-2003

Change of the share of Manufacturing-Processing in the Gross Value Added	-26%
Change of the share of Agriculture in the Gross Value Added	-44%
Change of the Secondary Sector share in employment	-14%
Change of the Agriculture share in employment	-35%
Productivity (on the basis of labour man-hours), 2002 (EU-15=100)	57
Average annual increase of industrial production	0.9%
Working time per week, 2002 (EU-15 =100)	115.5
Unemployment percentage increase in Greece	45%
Unemployment percentage increase in EU-15	1%
Employment increase in the 15-64 age bracket	10%
Export / import trade ratio with EU-15	from 48% to 30%

¹ See related analysis in: Ministry of Development, National Council for Competitiveness and Development, Labour Institute of the Greek Labour Associations, 2004, *Competitiveness of the Greek economy after 2006*, pp. 16, 24-25.

² See the development of the Greek economy in 1950 – 1980 by means of “Informal Resources”, the country’s highly competitive position in tourism and marine shipping in the competitive conditions of that era.

³ E.g. the GDP induced by Structural Fund contributions is estimated at 112% versus 158% for induced supply. In other words, a 43% share trickles away to other EU member states and 3% to third countries. See European Commission DG REGIO, J. Beutel, 2001, *The Economic Impact of Objective 1 Interventions for the Period 2000-2006*.

⁴ Employment in advanced technology activities is a mere 0.29% of total employment in manufacturing – processing, while employment in advanced-to-medium technology is 1.7%. See related investigation in: EC, DG Enterprise, 2003, *EU Productivity and Competitiveness: an Industry Perspective*.

Export / import trade ratio with all countries	from 53%	to 33%
Savings as a percentage of GDP	from 20%	to 17%
Private investments (EUR / 1000 residents)	from 0.6	to 2.6
New businesses started / 1000 residents (1997-2001)	2.2	
Average annual rise of the GDP (where the respective EU-15 average is 100)	1.28	

Eurostat, Ministry of Economics and Finance, Bank of Greece, data processed by authors

To a significant extent GDP growth is due to the multiplication effects of EU funds in consumption, construction, and services to businesses and persons within the country, i.e. activities with an indirect contribution to international competitiveness, since they are protected either by geographical isolation and cost of transport, or by the predominance of small and micro enterprises. The economy of Greece seems to have a problem of productive backwardness harking back to “historical” causes that don’t seem to have been adequately addressed in the period after the country’s accession to the EU⁵. Such productive backwardness generates consequences that cannot be remedied by implementing measures that are common for all EU member states, and which remain invisible in the values of indicators that are common for all countries. The productive backwardness becomes even more significant when we acknowledge that the productivity increase in the EU is not sufficient for achieving the goals of Lisbon, and that European businesses will become competitive when they achieve a self-sustaining rate of growth in productivity that will surpass the rate of increase of cost per production unit⁶. From the second half of the 1990s the rate of increase of labour productivity in the EU started to decline, with pronounced differences among the EU member states. In that context it is worth noting that Austria, Greece and Ireland present steady increases close to the levels of the USA. In recent years - with the exception of 2004 - the Greek rate of annual increase of labour productivity has been the highest or second highest in Europe:

TABLE 10: VARIATIONS OF LABOR PRODUCTIVITY

	1996-2000	2001-2004	2005-2006
Greece	0.7	2.6	0.8
EU-15	-0.3	-0.5	-0.2
Ireland	1.4	1.9	1.9

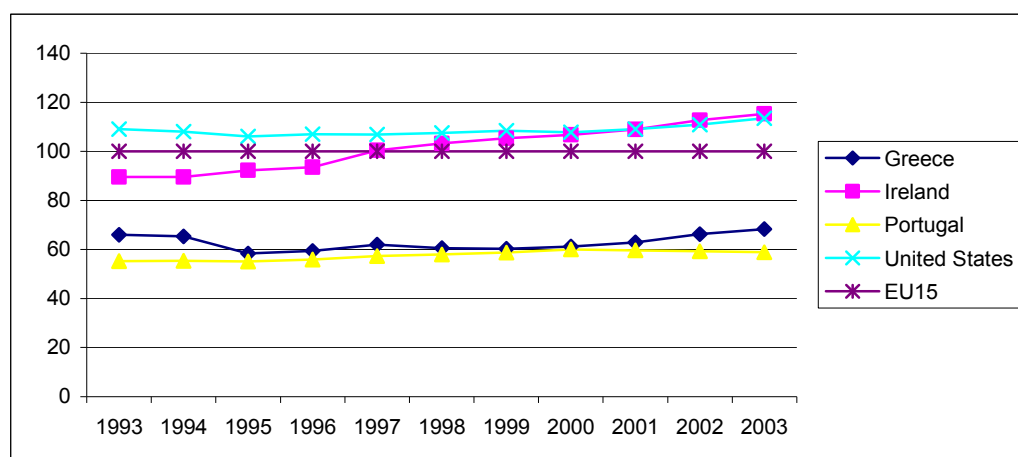
Ministry of Economics and Finance, Frontier Economics, 2005, General Study of the Development Prospects of Greece

Productivity expressed in terms of GDP (in PPS) per employed worker has risen during the last decade and is expected to reach 99.7 in 2007 (EU-15 = 100). However, Greece ranks low in labour productivity per hour, being second last within the EU-15.

⁵ Employment in advanced technology activities is a mere 0.29% of total employment in manufacturing – processing, while employment in advanced-to-medium technology is 1.7%. See related investigation in: EC, DG Enterprise, 2003, *EU Productivity and Competitiveness: an Industry Perspective*.

⁶ See Commission Announcement of 21 May 2002, concerning “Productivity: the key for competitiveness of the European economies and enterprises” [COM (2002) 262 final – not published in the O J of the European Communities.

PRODUCTIVITY PER WORKER (GDP in PPS) [SOURCE: EUROSTAT]



Consequently, the central concern for the Greek economy is how to avoid the danger of a de-structuring of production, which would in turn aggravate the problem of competitiveness. Long term strategy projections consider Greek productivity a very acute issue: because of its low TFP (Total Factor Productivity) and low employment rates, Greece might be confronted in the period up to year 2050 with declines in labour productivity and per capita GDP, compared with the other EU member states and the EU-25 average. When we also consider the fact that labour productivity in Greece is rising faster than the EU average while TFP is declining, we may conclude that constantly rising investments in production are in fact a one way road.

1.2.3. Competitiveness and Entrepreneurship

In Greece the increased trend toward entrepreneurship and the high rate of creation of new SMEs⁷ constitute a significant basis for reversing the low competitiveness. Yet it is perturbing that - to a large extent - this is a “need-to” entrepreneurship while the *High Potential Entrepreneurship* index and the *Corporate Entrepreneurship* index (which reflect the degree of business innovation) are low. In a series of comparative analyses, Greece ranks 1st in terms of self-employment in business; 7th in terms of open capitalization (seeking funds at the stock exchange); 8th in terms of the number of new enterprises as a percentage of all enterprises; 6th in terms of the economy’s overall “propensity toward entrepreneurship” (above the EU-15 and EU-25 average); 11th in terms of the rate of creation of new enterprises; 8th in terms of the net rate of increase (creation minus termination) of enterprises, third highest among EU-15 countries after Ireland and Luxembourg; last in terms of conditions of borrowing business capital; 13th in terms of electronic supply of public services to business (over the Netherlands and Luxembourg); third from last in terms of the overall corporate tax coefficient (over Germany and Italy); third from last in terms of the overall expenditure for R&D as a percentage of the GDP, and last in terms of the percentage

⁷ Business activity involves 5.8% of the adult population (just under the weighted average of the countries of the European sample) and the rate of starting new SMEs is higher than the EU-25 average (11% versus 8.5%). Global Entrepreneurship Monitor 2003, reported in: Ministry of Economics and Finance, Frontier Economics, 2005, *Report of the General Study of Development Prospects for Greece*.

of company turnover generated by e-commerce⁸.

The table that follows indicates performance in terms of a series of indicators employed to evaluate business activity in the country placing emphasis on innovative entrepreneurship in the context of the National Competitiveness Measurement System of the Greek National Council for Competitiveness and Development (2006 Annual Report on Competitiveness). The data was obtained mostly from sampling surveys performed by the European Commission or by agencies such as the Global Entrepreneurship Monitor (GEM) or the International Bank.

TABLE 11: ENTREPRENEURSHIP – BUSINESS INNOVATION: AN OVERVIEW

Index	Greece	EU – 15	EU – 25	Year
Entrepreneurship				
Overall business activity	7.9%	*5.2%	:	2006
Business executives' entrepreneurship	6.00	*5.70	:	2006
High potential business activity	12.5%	*13.9%	:	2003-4
Aspects of Entrepreneurship				
Gender disparities in entrepreneurship	2.85	*2.15	:	2005
Opportunistic entrepreneurship	5.2%	*4.3%	:	2005
Last resort entrepreneurship	0.9%	*0.9%	:	2005
Bureaucracy and new enterprise				
Administrative procedures for starting a new enterprise ¹	15.0	*6.9	:	2006
Time (days) required for starting a new enterprise ¹	38.0	*19.7	:	2006
Administrative cost to start a new enterprise ¹	24.2%	*6.3%	:	2006
Minimum capital needed to start a new enterprise ¹	116.0%	*33.9%	:	2006
Venture Capital				
Venture capital investments – starting a business	0.00%	2.23%	:	2005
Venture capital investments – expansion and replacement	0.06%	15.57%	:	2005
Innovative Entrepreneurship				
E-commerce	1.1%	*4.2%	4.0%	2004-6
Partnerships for innovation	24.0%	*29.7%	*33.9%	2004
Expenditures for innovation	3.1%	2.1%	*1.9%	2004
In-house innovation	18.0%	33.7%	:	2000
New products (already in the market)	6.2%	6.5%	*6.2%	2004
New products (new in the market)	4.8%	5.9%	*6.3%	2004

Source: Eurostat

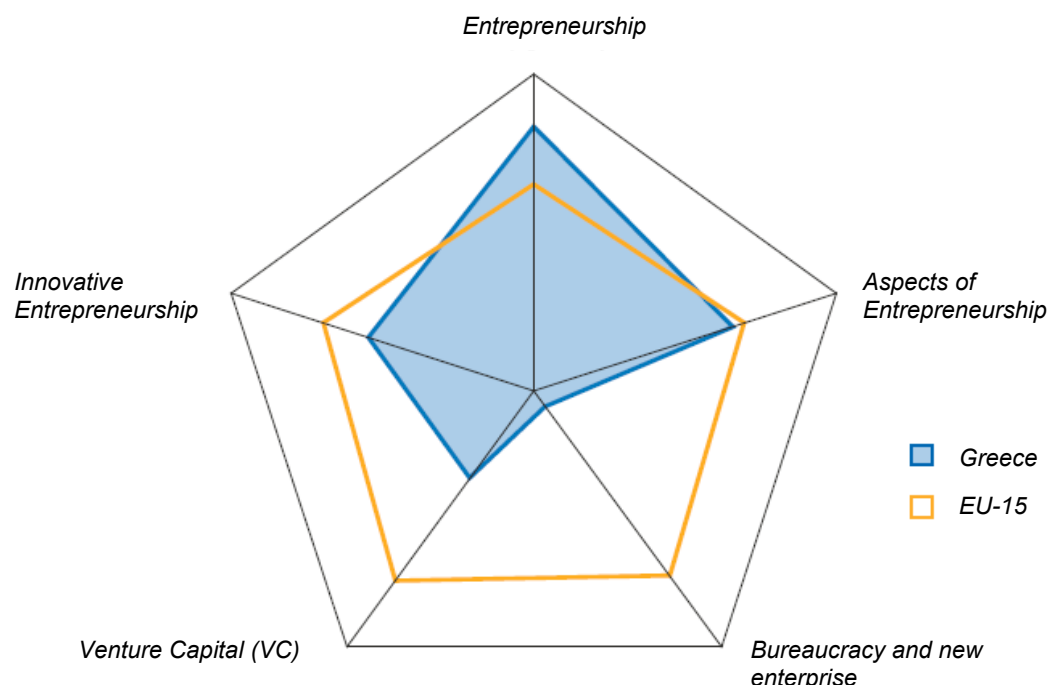
¹ Assumptions: (a) Limited liability company, (b) operating in the largest city in the country, (c) 5 owners, all domestic nationals, (d) its starting capital is ten times the per capita GDP in cash, (e) leases its facilities, (f) is not entitled to any subsidies, (g) employs 50 workers within one month of its starting date, (h) its turnover is no less than 100 times the per capita GDP, (i) its By-laws are 10 pages long, (j) it is a commercial or manufacturing – processing company not trading in products subject to special regulations (e.g. alcohol), does not trade outside the country, and is not subject to special regulations for environmental protection (e.g. very polluting activity).

*Numerical average of EU member states
: Data not available

⁸ EC, Benchmarking enterprise policy, Results from the 2004 Scoreboard, 2004. see analysis in: Ministry of Development, BCS - Remako, 2005, *First Report of O.P. Competitiveness 2000-2006*, pp. 220-223.

By applying the most recent available normalized values of the indicators in the Table above, the diagram below presents an overview of entrepreneurship in Greece in relation to the EU-15 average.

DIAGRAM



Source: 2006 Annual Report on Entrepreneurship

The diagram indicates that Greece is below the EU-15 average in terms of entrepreneurship, while it is very close to average in terms of the *Aspects of entrepreneurship*. It is lagging behind the EU-15 average in terms of *Innovative Enterprise*, and far behind in *Venture Capital*⁹ investments. The largest deviation between Greece and the EU-15 average is in terms of *Bureaucracy and New Enterprise*.

Greece is in bottom position among the eighteen EU-25 member States with available 2005 data on business capital credit (borrowed capital).

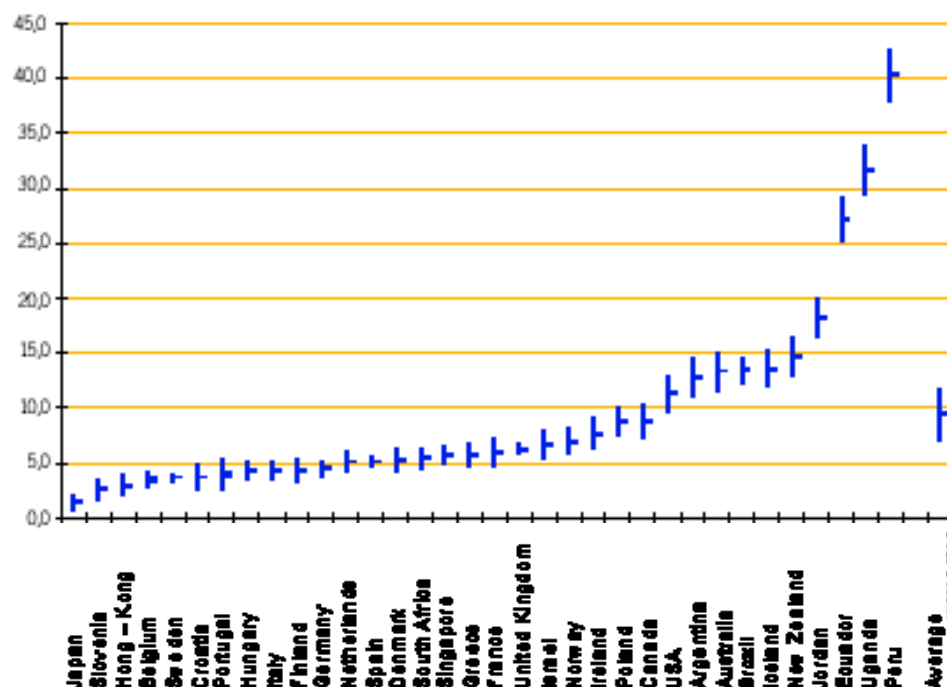
Regarding the business environment evaluation indicators comparing Greece to other EU member states, based on the European Commission's *Enterprise Policy Scoreboard*, the basic weak fields that Greece appears to have in terms of its SMEs are the administration and taxation, innovation, sustainable development, while it has no strong fields¹⁰. The values of the indicators ought to be correlated with the factors that constrain business development, as stated by businesses themselves: the major factor (especially for micro – enterprises, the

⁹ Total venture capital investments as a % of the GDP did not exceed 0.06% in 2005, when the EU-15 average reached 13.80%. The first place among member-states was held by Denmark with 40.22%, followed by the United Kingdom with 36.6%. In Greece, only part of these investments was channelled towards the creation of new enterprises, while the largest share was dedicated to the expansion and replacement of asset equipment of extant enterprises.

¹⁰ EC, *A pocketbook of enterprise policy indicators*, 2004

vast majority of Greek SMEs) is the diminishing purchasing power of their clients¹¹, which reflects on the macro-economic rather than the micro-economic environment. Additionally, the number one reason for networking and collaboration (for SMEs employing under 50 persons) seems to be the approach to a new and larger market, while the number two reason seems to be the better supply of inflows (for SMEs employing fewer than 10 persons), while better access to know – how and technology is reported as reason number three. On the basis of these findings, for Greek business the central points for collaboration and networking seem to be: for “smaller” enterprises the approach to a new and larger market, and for “larger” enterprises better supply of inflows, increased production capability, and reduced cost.

Total Business Activity Index (2004) per Country



Source: Economic and Industrial Research Foundation, processed GEM results

In a country where 30% of the active population is self-employed or owns a small business¹², the problem is not lack of entrepreneurship but rather the features and viability potential of enterprises.

¹¹ And not e.g. quality management (last in rank), new technology or new organizational schemes (3rd and 2nd from last). Significant factors include the lack of specialized personnel (number 2), access to funds (number 3), the regulatory climate (number 4), and infrastructures (on par with new technology). European Network for SME Research survey in: EC, *Observatory of European SMEs, Highlights 2003*

¹² National Statistical Service of Greece, second quarter of 2005 data

The fact that 97% of all enterprises employ fewer than 10 persons is not really a problem, since it is expected that micro enterprises enjoy the benefits of creativity. If there is a question worth pondering, it is why only approximately 2,000 Greek enterprises have managed to exceed and maintain a staff size of 50 persons.

According to all available indications, the problem of entrepreneurship in Greece seems to relate to the inability of SMEs to expand and enlarge: practically all (96%) enterprises in Greece employ from 0 to 4 persons, another 2% employ from 5 to 9 persons, while the remaining 2% employ 10 persons and over. The average personnel in Greek enterprises are 2 persons, the lowest among EU member states, whose average is 6 (lower than the average personnel of enterprises in the USA).

TABLE 12: BUSINESSES ACCORDING TO PERSONNEL

Personnel	2002	%
0-4	844,917	96
5-9	17,713	2.0
10-19	8,588	1.0
20-29	2,908	0.3
30-49	2,335	0.3
50-99	1,534	0.2
100+	1,323	0.2
Total number of businesses	879,318	100.00

From 1999 to 2005 the number of entrepreneurs (self-employed, with or without personnel) increased by 1.7%. When we investigate the extent of women's participation in the total number of the two groups of entrepreneurs (employers and self-employed) we see that women represent approximately 1/4 of the total.

TABLE 13: SELF-EMPLOYED PROFESSIONALS AND PERSONNEL, 1999-2005
(THOUSAND WORKERS)

	Self-employed with personnel	Self-employed without personnel	Total	Total number of workers	Self-employed % of total	as
1999	305.8	991.6	1,297.4	4,040.4	32.1	
2000	326.7	998.4	1,325.1	4,097.9	32.3	
2001	336.3	954.3	1,290.6	4,103.2	31.2	
2002	315.0	996.5	1,311.5	4,190.2	31.3	
2003	310.2	1,018.5	1,328.7	4,286.6	31.0	
2004	346.8	962.5	1,309.3	4,330.5	30.2	
2005	352.2	967.5	1,319.7	4,381.9	30.1	
2005-1999	+ 46.4	- 24.1	+ 22.3	+ 341.5	-	
%	+15.1	- 2.4	+ 1.7	+ 8.5	-	

Source: National Statistical Service of Greece

The problems of Greece relating to entrepreneurship don't include only the difficulty of

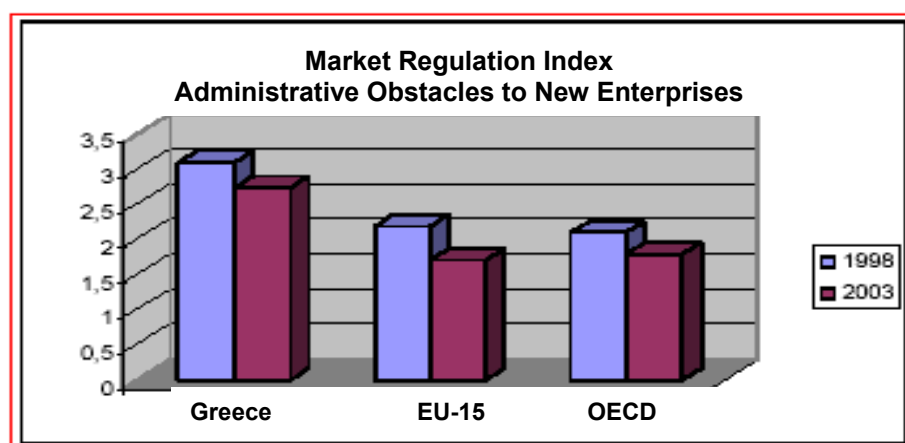
starting a business but also the relative difficulty noted in the transition from small “family businesses” to businesses with “professional management”. A Eurobarometer survey found that the proportion of Greek persons who started a business during the last three years approached 12%, similar to the USA, while the corresponding figure in EU-15 does not exceed 4%. The objective is the creation of flexible and innovative SMEs, but the rate at which such businesses start is still low, in spite of the administration’s initiatives offering incentives through development laws and Operational Programmes. The small size of Greek enterprises (self-employment, traditional organizational structure, small number of personnel and low initial capital) lead to:

- ✓ Relatively low production capability, and difficulty operating in the expanded “internal market” of the EU-25 and the Balkan countries
- ✓ Limited use of the economies of scale in production and commerce
- ✓ Limited capacity to make large investments in new technology equipment
- ✓ Inability to monitor developments in the domestic and foreign markets
- ✓ Difficult access to the banking system, aggravated by a failure to develop alternative financing instruments.

With a view to obtaining a clearer picture of matters such as sectoral composition, the synergies among sectors, the regional dimension, the performance of sectors in terms of innovation and R&D, the size and life cycle of enterprises, a study has been commissioned and will be utilized to specialize and implement the Operational Programme “Competitiveness and Entrepreneurship” (EPAE).

Source: Global Entrepreneurship Monitor

MARKET REGULATION INDEX : ADMINISTRATIVE OBSTACLES TO NEW BUSINESSES



* The index ranges from 0 to 6, zero standing for minimum and six for maximum

The Small and Micro-Enterprises Guarantee Fund (SMEGF) was established in order to facilitate the access of small enterprises in particular to the bank system, and to support the development of alternative financing instruments. The SMEGF¹³ started at a slow pace, but picked up speed when loan guarantees were combined with loan cost subsidies, and the Fund is now expected to exceed its initial goal. In the period up to April 2007 included, the SMEGF had helped 3,200 enterprises and provided initial guarantees for 120 million €. The effort to develop new financing instruments must continue and intensify during the new programming period as it is a crucial factor for the development of innovative entrepreneurship, and for strengthening the competitiveness of Greek enterprises.

An important factor for the development of entrepreneurship is the creation of organized business infrastructures. A special study performed under the current Operational Programme “Competitiveness” (EPAN) aims to orient the OP interventions in the area of business infrastructures¹⁴. The study includes a full analysis of the existing regulatory environment, the volume and trends of demand for the existing areas, the development priorities of the regions, the proposals in the Regional Master Plans, and the experience and respective policies in other EU member states. Using a specialized methodology to select regions and evaluate their eligibility as National Scale regions (based on a model combining multiple criteria—spatial, technical, developmental, and social), the study evaluated specific areas situated (in order of priority) in the Prefectures of Attica, Thessaloniki, Viotia (Boeotia), Achaia, Magnesia, Corinthia, Larissa, Iraklion (Heraklion), Ioannina, Phthiotis, and Evia (Euboea).

Another important factor for developing business is the existence and sound operation of a series of (immaterial) structures that support business activities. Having recognized the serious lack of support structures for Greek enterprises, the Operational Programme “Competitiveness” (EPAN) has already started a quasi-network of support structures comprising 13 Business and Technology Development Centres, and a Central Support Structure for the Centres. The great number of enterprises who contacted the Centres (over 48,000 enterprises in the second half of year 2006) confirms the necessity to continue the endeavour and to upgrade the services offered to business, whilst improving the operation of the network and its Central Support Structure. Its 49 Investor Reception Centres and the Observatory for SMEs (whose Final Beneficiary is EOMMEX, the Hellenic Organization of SMEs and Handcrafts) aim to provide information, cultivate the spirit of enterprise, monitor the competitiveness of SMEs, provide support to individual enterprises, create a nucleus of business consultants, organize business services, undertake actions to organize, mediate and utilize financing instruments, and undertake actions to support internationalisation and orientation of businesses toward exports.

To be more specific, the Operational Programme “Competitiveness” (EPAN) includes a complete and integrated network of structures for improving and implementing the business environment, which will attempt to provide effective information, support and facilitation in obtaining licenses from administration, and also to monitor business activities in the regions of Greece. The network includes 13 Business and Technology Development Centres, their Central Support Structure, along with the 54 Investor Reception Centres operating within the country’s Prefectural administration, the SME Observatory and the National Council for Competitiveness.

Supported by their Central Support Structure and the SME Observatory, the Business and

¹³ www.tempme.gr

¹⁴ General Secretariat for Industry, ETBA Industrial Areas SA, 2004, Orientation study for the Interventions of the Operational Programme “Competitiveness” (EPAN) in the new National Scale Industrial and Business Areas.

Technology Development Centres functioned as Regional Observatories for business, recording the volumes of local economies (economic results), technological performance, human resources and level of organization on a sample of relatively large businesses. Furthermore, in collaboration with the SME Observatory, the Business and Technology Development Centres record business demographics in the regions (start-ups - terminations -changes).

The Central Support Structure of the Business and Technology Development Centres started operating exactly one year after the Centres themselves (July 2004) and in spite of that delay its operation contributed to normalize and accelerate the processes of monitoring and regulating the work of the Centres.

TABLE 14: NUMBER OF BUSINESSES THAT USED THE SERVICES OF THE BUSINESS AND TECHNOLOGY DEVELOPMENT CENTRES FOR BY THE SECOND HALF OF 2006

BUSINESS AND TECHNOLOGY DEVELOPMENT CENTRES	NUMBER OF BUSINESSES THAT USED THEIR SERVICES
CRETE	8,000
CENTRAL MACEDONIA	4,670
WESTERN MACEDONIA	5,413
THESSALY	7,757
EPIRUS	1,172
PELOPONNESE	1,828
WESTERN GREECEΣ	5,369
STEREA HELLAS	1,110
EASTERN MACEDONIA & THRACE	2,425
SOUTHERN AEGEAN	1,815
IONIAN ISLANDS	1,709
ATTICA	3,904
NOTHERN AEGEAN	2,924
TOTAL	48,096

Source: General Secretariat for Industry, 2nd half of 2006

The Investor Reception Centres (IRCs) that operated under the Prefectural administration were funded under Measure 1.3 of the Operational Programme. The total number of IRCs in operation was 49, and their role was to provide assistance in addition to the one-stop-shop services provided by the Prefectural Administrations' agencies. The IRCs' degree of involvement in licensing procedures is described in their regulation, which is appended to the planned contracts between the Ministry of Development (General Secretariat for Industry), the Prefectural Administration and Development Companies (which provide premises and personnel for IRC operation). Law 3325/05 provides for crucial details concerning the function and role of the IRCs.

The National Observatory for SMEs was created in 2003 having as Final Beneficiary the Hellenic Organization for SMEs and Handcrafts EOMMEX.

The National Council for Competitiveness was instituted by law 3279 / 01 November 2004 to cover a significant gap in the overall coordination.

From the experience gained during those efforts, and also during the efforts of previous Programming Periods, it was understood that¹⁵ lack of collective spirit and coordination leads

¹⁵ See the Expert Opinion Report, Operational Programme "Competitiveness" (EPAN), T. Alexandrides, 2003.

to a waste of resources without achieving the desirable end results. The existence of a large number of supporting structures, not always with distinct competences, causes confusion among the enterprises – users, who gradually lose their confidence because they are unable to grasp the role of the multiple supporting structures, and also at the level of central structures (mostly government ministries) where the necessary collaboration for finding synergies is not imprinted.

In the framework of the new programming period, it will be necessary to group structures and develop synergies, in the form of a unified network, by reorganizing and merging overlapping structures; to make the transition to a rationale that involves strategic development planning mechanisms; to fortify the links of SMEs with existing know-how production infrastructure; to develop the ability to observe in an effective way the parameters for development (foresight, innovation observatories in each region, benchmarking methods); and to avoid wasting human resources. The exhaustive investigation of both Greek and other European experience ¹⁶ leads to this conclusion.

1.2.4. Competitiveness and innovation and human resources

Despite the significant steps made in terms of innovation, Greek enterprises as a whole continue to lag behind their competitors in Europe and the world in general. That gap is significant mostly in terms of the type of innovation adopted by Greek companies, and of the added value they generate. The Tables and diagrammes in this section (obtained from the *European Innovation Scoreboard* and from the *Community Innovation Survey 4*) and in the Appendix indicate that:

- In spite of the fact that Greece showed the 3rd highest percentage increase in the number of businesses with innovation activity in the period starting in 1998, during the period 2002 – 2004 Greek enterprises ranked at about the middle among the EU member States (27 + 2) in relation to that indicator, with a percentage increase of 35.8%, close to Italy and Norway but way behind Germany (65%). [Diagrammes 1 and 2]
- The weakest aspects of the Greek national innovation system, obtained from EIS for the year 2006, concern matters such as expenses for research, lifelong learning, venture capital, employment, and value added in advanced technology activities, the intellectual property rights indicators, and the penetration of information and communication technology. Other indicators, such as the share of new products for business, organizational innovations, expenses for innovation and the educational level of young workers, show more positive trends. Greek businesses are close to the EU average in terms of introducing innovation that is new to the particular business (74%), but lag far behind (48%) in introducing innovation that is new to the market. At the same time they are far ahead (139%) in terms of introducing organizational innovation. Greece ranks 9th among the 23 EU member States (and Norway) in organizational innovation. Those indicators confirm the fact that Greek enterprises “modernize” at relatively rapid rates, undertaking restructuring and

¹⁶ See BCS-Remaco, *Interim Evaluation Report of the Operational Programme “Competitiveness” 2000-2006*, chapter 5.3 καί Appendix: Special Field Study.

EC, DG Enterprise / Austrian Institute for Small Business Research, *Support Services for Micro, Small and Sole Proprietor’s Businesses*, 2002.

Operational Programmed for Competitiveness and Development, Study Report for *Business Support Structures*, D. Hatzantonis 2006.

acquiring new equipment, and thus accomplishing reduced production cost and higher quality of products that are already in production, while at the same time they are cutting back jobs.

- Based on the Sector Innovation Scoreboard (2005)¹⁷ we note that all divisions of manufacturing – processing record performances significant lower the EU-15 average, with no branch showing high or medium innovation capacity. By contrast, services show more positive performance: some rank near or even above the EU average (transport, communication, commerce), with information science ranking first in the EU-15 member states. It should be noted that the most innovative divisions have very small percentage shares in the Greek economy: information science held only 0,3% of the overall value added in 2003 (current prices), six time less than the average EU index. Its increase during 1990 – 2003 was only 0.2%, while the increase in EU-15 has been 0.9%.
- Greek performance in lifelong education is low compared to the actual needs of the economy, since it doesn't contribute adequately to updating the knowledge and skills of the labour force. Together with Portugal, Greece holds the last two positions in EU-25 in terms of educating and training persons in the 25 to 64 age bracket (2% in 2004, the EU-25 average being 9.9%). Although some minimal change was noted in the recent past (2000 – 2002), in 2005 the Greek percentage started shrinking again.
- While several of the “inflow” indicators (specialized human resources, expenditure for innovation, etc.) are close to the EU average, and in some cases even higher, the “output” indicators (employment in new areas, number of patents received) are lagging far behind. That situation raises questions concerning the effectiveness of the effort, the quality of human resources, the ratio of public versus private funding of RTD, and the orientation of private and public funding. One of the inflow indicators that remains very low in spite of the efforts of recent decades is the expenditure of enterprises for RTD. That could be one of the reasons for the overall effectiveness of the system, in combination with the lack of links and interactions between the agencies that produce new knowledge and those that exploit it (data from EIS 2004 – 2006). Greek companies are classified as enterprises that adopt innovations rather than “strategic innovators”. Greece ranks 13th among 19 EU countries in terms of the perception of its enterprises that innovation is a significant component of their strategy, while it ranks higher (9th) in the category of “adopters”, enterprises that adopt innovation from other companies that developed it.
- Long term observation of the indicators from 1998 to 2004 shows steady improvement of certain figures, while the overall situation seems stagnant. In some case (e.g. lifelong learning, expenses for Information and Communication Technology) the relative position of Greece compared with other EU member states has deteriorated during the last year (EIS data).

¹⁷ Based on a complex index used for ranking the different divisions of manufacturing – processing and the services in each country, according to which the high performance in innovation is based on a combination of high tendency to innovation and RTD, high level of personnel employed in combination with life long learning, new products for the market and collaboration with other businesses in the innovation process.

TABLE 15: COMPARATIVE ANALYSIS OF THE LEVEL OF INNOVATIVE BUSINESS ACTIVITY IN GREECE AND IN OTHER E.U. COUNTRIES DURING THE SURVEY PERIOD CIS4 (2002 – 2004)

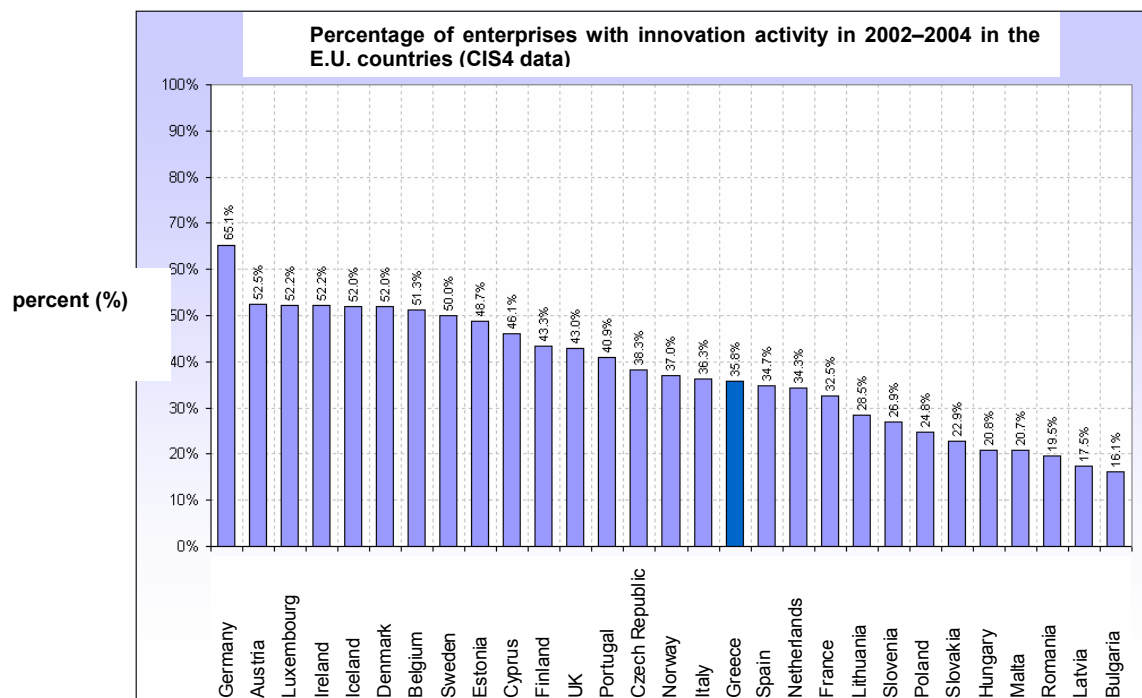
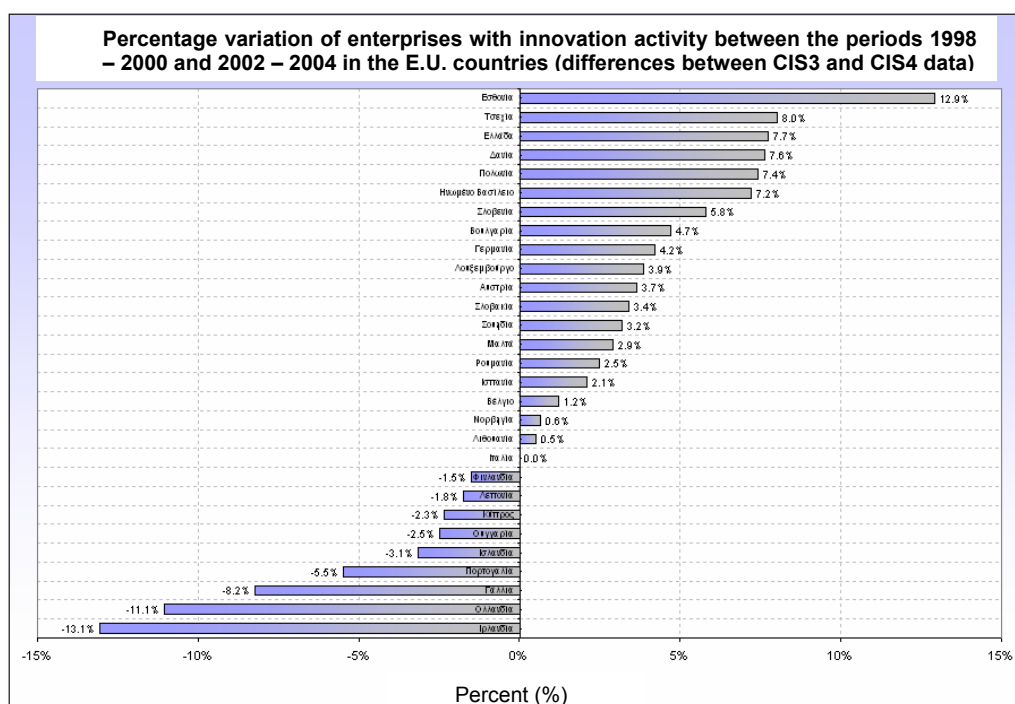


TABLE 16: COMPARATIVE ANALYSIS OF VARIATIONS IN THE LEVEL OF INNOVATIVE BUSINESS ACTIVITY IN GREECE AND IN OTHER E.U. COUNTRIES BETWEEN THE SURVEY PERIODS CIS3 (1998 – 2000) AND CIS4 (2002 – 2004)



Greece is also lagging behind in Research and Technological Development (RTD), and as a result the higher labour productivity does not contribute adequately to higher competitiveness of Greek products. Appendix 1 of this Operational Programme includes (pp. 13 – 24) a great volume of statistical data and indicators relating to research activity in Greece, both in the public sector and in enterprises. This is where we can most clearly see the characteristic duality of the Greek RTD system: in spite of the remarkable performance of Greek researchers in European “competitive” programmes, Greek businesses and other organizations have not developed nor exploited the results of research and the new knowledge. On the other hand the polarisation of the “innovation chain” (the concentration of high level activities in developed centres, and the transfer of low level activities to countries with low cost scientific work) has been operating to the detriment of “medium-level” countries such as Greece, which is not in a position to “protect” its accomplishments in this field, or to support them “indirectly” (e.g. by means of higher expenditures for defence and security).

The Gross Domestic Expenditure for Research and Technological Development (GDE for RTD) was a mere 0.62% of the Greek GDP in 2003 and 0.61% in 2004. Those figures represent a percentage decline from year 1999, albeit not in absolute expenditure. Industry participation is very low (about 30%), with about half of all research performed at the Universities and other Higher Education institutions. In 2003 industry financed a mere 28% of R&D, while the public sector financed 70.5%.¹⁸

Low mobilisation of enterprises is one of the weakest links of the Greek innovation – research – technology chain, reflecting more general structural weaknesses of the production base (small size enterprises, traditional activities, very low capacity in areas producing technical innovation, transfer of ready–mature technology rather than in-house development, business personnel lacking a high level of science education and training, and risk avoidance). Recent surveys¹⁹ indicate more favourable trends: more spending by business for RTD, a slightly higher participation overall. Out of the total number of enterprises that declared spending for research, 73% were small, but the largest share of in-house spending belongs to the medium and large companies. The gap has a clear regional bias: two of the country’s 13 Regions (Attica and Central Macedonia) are far ahead in all activities. Attica accounts for 58% of all GDE for RTD, 76% of expenditures made by business, 62% of expenditures made by public research institutions, and 44% of expenditures made by state universities; Central Macedonia accounts for 14.5% of all GNE for R&D, 10.5% of expenditures made by business, 11% of expenditures made by public research institutions, and 19% of expenditures made by state universities (see detailed report in Appendix 1).

The problem is even greater in terms of linking human resources with innovation and entrepreneurship: the number of staff involved in in-house research in businesses increased between 1999 and 2001 and then dropped in 2003. Out of a total manpower of 57,000 persons engaged in technology and research, half are researchers.

Innovation activities within Greek enterprises were recorded with CIS4 specifications, yielding the following interesting results:

- innovation activity is not only broader in large enterprises, but its rate of increase is also higher. The majority of small and micro enterprises have a hard time following the pace imposed by global competition and the rapid proliferation of knowledge (see Tables 20 and 21).

¹⁸ European Innovation Scoreboard 2005. Overall performance is calculated using index SII.

¹⁹ Measurement of Research and Technological Development activities by enterprises, 2003.

- The service sector presents somewhat higher innovation activity than manufacturing and processing, but its growth in the two periods recorded shows a slower adjustment rate.
- Difficulties that concern innovation activity appear greater in manufacturing – processing than in the services (see Tables 22 and 23). The cost of innovation seems to be the most significant obstacle, but generally speaking there is no single obstacle dominating all others in the Tables that follow. All obstacles share a degree of “responsibility” for the delays of enterprises, whether active or inactive, in terms of innovation, which makes for complex policy measures aimed to remedy the situation.
- In Table 24 we can see that in order to develop and implement innovation, enterprises collaborate or otherwise interact with their suppliers, clients and competitors, a situation corroborated in the international bibliography. This finding makes it even more imperative to support the creation and/or expansion of clusters of enterprises.
- In terms of the financing offered by various tiers of public administration to businesses, with a view to implementing and disseminating innovation, the Greek government and the European Commission provide innovation funding to approximately 20% of all enterprises, and an additional 8% through the Framework Programme for research. Medium size enterprises are the ones that benefit more than any other category, especially in manufacturing – processing, followed by service companies, mainly ICT enterprises.
- Table 25 indicates that innovation is more frequently promoted through the acquisition of equipment, machinery and software, and personnel training. On the other hand, 51% of innovating enterprises have in-house RTD, while 30% engage in long-term RTD activities (see Table 25).
- Analysing the innovation performance of enterprises in the country’s regions, the 2002–2004 survey confirms the domination of enterprises in the two major Greek cities. The Athens region is ahead and its special weight shapes the overall picture. CIS survey data indicate that Central Macedonia is far behind in terms of innovation in large service-sector enterprises, while in some other areas it is actually behind not only the Athens region but other areas of Greece as well. It is expected that the infrastructures created as of 2003 will change that situation in the near future (see Table 26).
- An analysis of business innovation by sector (see Table 27) highlights the advanced position of certain modern services, but also of traditional activities such as mines and quarries, energy (chemicals and petroleum industry, power, gas and water supply) as well as electronic equipment. Other secondary sector activities remain more or less “conservative” or cautious in their effort to stand up to competition, the most typical example being the textile and leather processing enterprises.

TABLE 17: INNOVATION ACTIVITY AND TECHNOLOGICAL INNOVATION IN 2002 - 2004

Enterprises	Innovation activity	Change against CIS3	Technological innovation ²⁰	Innovation in products	Innovation in processes
	35.8%	7.7%	35.1%	25.1%	31.8%
<i>Small [10 – 49 employees]</i>	33.9%	7.5%	33.1%	23.0%	30.0%
<i>Medium [50 – 249 employees]</i>	43.1%	11.3%	43.1%	33.3%	39.2%
<i>Large [250+ employees]</i>	66.6%	21.1%	66.6%	54.2%	58.8%
Secondary sector	35.1%	8.0%	34.3%	24.9%	30.9%
Services	36.7%	4.1%	36.2%	25.3%	33.0%

Source: CIS 4

TABLE 18: EXTENT OF PRODUCT INNOVATION IN 2002 - 2004

	New for the market	New for the enterprise
Enterprises	15.9%	20.8%
<i>Small [10 – 49 employees]</i>	14.7%	18.9%
<i>Medium [50 – 249 employees]</i>	20.5%	29.0%
<i>Large [250+ employees]</i>	36.1%	43.9%
Secondary sector	15.6%	21.2%
Services	16.3%	20.4%

Source: CIS 4

²⁰ CIS 4 methodology includes the definitions that follow:

- *Technological Innovation*: introduction in the market of new products or services whose technology is new or significantly improved (product innovation), or adoption of new or significantly improved processes (process innovation), by an enterprise which in turn is called **Innovator (enterprise)**.
- An *Innovation activity* includes the technological innovations of the respective enterprise, and also activities related to technological innovation (innovation activities) that had been abandoned or not completed by the time period examined. **Innovators and enterprises with only on-going and/or abandoned innovation activities are called Enterprises with Innovation Activity.**

TABLE 19: PERCENTAGE OF ENTERPRISES WITH INNOVATION ACTIVITY AND INNOVATION ACTIVITY HAMPERING FACTORS ENCOUNTERED IN 2002 – 2004

	Total	Manufacturing – processing	Services
Overall	69.9%	77.7%	61.4%
Lack of funds within enterprise or enterprise group	26.4%	33.8%	18.2%
Lack of financing sources outside the enterprise	26.7%	29.9%	23.1%
Innovation costs too high	33.9%	39.9%	27.3%
Lack of qualified personnel	17.6%	20.5%	14.4%
Lack of information on technology	10.8%	10.9%	10.7%
Lack of information on markets	10.9%	10.1%	11.7%
Difficulty in finding cooperation partners for innovation	18.8%	21.1%	16.4%
Markets dominated by established companies	16.2%	14.8%	17.8%
Uncertain demand for innovative goods or services	17.9%	16.1%	20.0%
No need to innovate due to prior innovation	4.8%	5.4%	4.1%
No need to innovate because no demand for innovation	6.5%	6.0%	7.0%

Source: CIS 4

TABLE 20: PERCENTAGE OF ENTERPRISES WITHOUT INNOVATION ACTIVITY AND INNOVATION ACTIVITY HAMPERING FACTORS ENCOUNTERED IN 2002 – 2004

	Total	Manufacturing – processing	Services
Overall	42.1%	43.1%	40.8%
Lack of funds within enterprise or enterprise group	15.2%	21.3%	7.7%
Lack of financing sources outside the enterprise	11.8%	17.0%	5.1%
Innovation costs too high	20.0%	21.5%	18.2%
Lack of qualified personnel	11.9%	10.7%	13.5%
Lack of information on technology	5.7%	8.2%	2.6%
Lack of information on markets	5.3%	9.5%	0.0%
Difficulty in finding cooperation partners for innovation	3.3%	3.0%	3.6%
Markets dominated by established companies	0.8%	0.3%	1.4%
Uncertain demand for innovative goods or services	14.5%	17.1%	11.3%
No need to innovate due to prior innovation	9.4%	7.9%	11.3%
No need to innovate because no demand for innovation	15.2%	12.1%	19.0%

Source: CIS 4

TABLE 21: MOST VALUABLE PARTNERS IN INNOVATION COOPERATION DURING 2002 – 2004

	Total	Manufacturing – processing	Services
Other enterprises within the same group	7.7%	6.3%	9.0%
Suppliers of equipment, materials, components or software	23.8%	40.3%	8.9%
Clients or customers	18.5%	14.6%	22.0%
Competitors or other enterprises of the same sector	21.7%	17.5%	25.4%
Consultants, commercial laboratories, or private RTD institutions	11.9%	2.6%	20.3%
Universities or other higher education institutions	15.2%	16.1%	14.4%
Government or public research laboratories	1.2%	2.6%	0.0%

Source: CIS 4

TABLE 22: PERCENTAGES OF COMPANIES INVOLVED IN SPECIFIC INNOVATION ACTIVITIES IN 2002 – 2004

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Enterprises	51.0%	30.2%	32.0%	92.3%	14.7%	72.3%	54.0%	25.8%
<i>10 – 49 personnel</i>	48.5%	26.3%	27.2%	91.2%	13.8%	68.1%	49.7%	24.5%
<i>50 – 249 personnel</i>	62.3%	44.6%	48.0%	97.6%	18.4%	86.8%	70.0%	32.2%
<i>250+ personnel</i>	53.5%	47.3%	63.7%	91.8%	16.0%	96.4%	72.7%	24.2%
Secondary sector	48.3%	31.7%	27.2%	92.1%	11.9%	67.6%	55.6%	22.3%
Services	54.2%	28.5%	37.6%	92.5%	18.0%	77.8%	52.1%	30.0%

[1]: Intramural RTD

[2]: Continuous intramural RTD

[3]: Extramural RTD

[4]: Acquisition of machinery, equipment and software

[5]: Acquisition of other external knowledge

[6]: Personnel training

[7]: Market introduction of innovation

[8]: other

Source: CIS 4

TABLE 23: PERCENTAGES OF ENTERPRISES WITH INNOVATION ACTIVITY AND INNOVATORS BY SIZE AND GEOGRAPHICAL AREA ²¹

		Overall		Secondary Sector		Services	
	Personnel	With innovation activity	Innovator	With innovation activity	Innovator	With innovation activity	Innovator
Total	Total	35.8%	35.1%	35.1%	34.3%	36.7%	36.2%
	10 to 49	33.9%	33.1%	32.5%	31.5%	35.6%	35.0%
	50 to 249	43.1%	43.1%	44.4%	44.4%	40.8%	40.8%
	250 +	66.6%	66.6%	64.3%	64.3%	70.6%	70.6%
Attica	Total	39.6%	38.7%	39.6%	38.6%	39.7%	38.9%
	10 to 49	36.5%	35.4%	36.9%	35.7%	36.1%	35.2%
	50 to 249	53.7%	53.7%	51.7%	51.7%	56.1%	56.1%
	250 +	67.4%	67.4%	51.7%	51.7%	100.0%	100.0%
Central Macedonia	Total	30.5%	30.3%	31.9%	31.9%	27.6%	27.0%
	10 to 49	25.5%	25.2%	23.2%	23.2%	30.2%	29.4%
	50 to 249	53.9%	53.9%	65.1%	65.1%	16.1%	16.1%
	250 +	48.6%	48.6%	100.0%	100.0%	0.0%	0.0%
Other Greece	Total	33.2%	32.5%	31.3%	30.0%	35.7%	35.7%
	10 to 49	35.1%	34.3%	33.4%	31.8%	37.1%	37.1%
	50 to 249	20.0%	20.0%	18.5%	18.5%	22.9%	22.9%
	250 +	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CIS 4

TABLE 24: PERCENTAGES OF ENTERPRISES WITH INNOVATION ACTIVITY BY SECTOR OF ECONOMIC ACTIVITY

NACE	Activity	Percentage of enterprises with innovation activity	Percentage of innovator enterprises
All NACE	Total	35.8%	35.1%
10-37, 40-41	Industry	35.1%	34.3%
10-14	Mines & quarries	47.8%	47.8%
15-37	Manufacturing	34.9%	34.0%
15-16	Food, beverages & tobacco	35.4%	34.2%
17-19	Textiles & leather processing	29.3%	29.3%
20-22	Wood, paper & publishing	35.1%	33.4%
23-24	Chemicals and petroleum	49.8%	46.4%
25-26	Plastics & non-metal products	34.6%	34.6%
27-28	Metals	34.8%	34.8%
29	Mechanical equipment	31.5%	31.5%
30-33	Electronic equipment	41.9%	41.9%
34-35	Transport equipment	31.9%	31.9%
36-37	Other industry	36.7%	33.8%
40-41	Electricity, natural gas and water supply	52.4%	52.4%

²¹ Certain results in the Table, e.g. the 100 percent figures in the category “250+ personnel” reflect the small number of large businesses in that area.

NACE	Activity	Percentage of enterprises with innovation activity	Percentage of innovator enterprises
51,60-67,72, 74.2-74.3	Services	36.7%	36.2%
51	Wholesale trade	31.8%	31.8%
60-64	Transport, storage and communication	37.8%	35.5%
60-63	Transport & storage	35.4%	33.6%
64	Telecommunications	56.3%	50.6%
65-67	Financial intermediation	50.2%	50.2%
72	Computer and related activities	100.0%	93.6%
74.2	Architectural and engineering activities	50.6%	50.6%
74.3	Technical testing and analysis	100.0%	100.0%

Source: CIS 4

A basic pillar for formulating and implementing an effective strategy to fortify entrepreneurship, competitiveness and innovation in the economy of Greece is to review and modernise the regulatory framework, the means and the policies relating to human resource development. Neither the educational system's targeting and cognitive contents (even at higher levels), nor the current regulatory framework and the means of implementing initial and on-going vocational training, are in a position to match labour demand and supply by adapting the qualifications and skills of human resources to the demands of business, especially where those demands concern advanced matters such as the development of peak technologies, management of research and innovation, etc. Even when the system functions correctly, administrative dissociation and the lack of legislated collaboration between the authorities in charge of education and vocational training on the one hand, and the authorities in charge of promoting entrepreneurship, competitiveness and innovation on the other hand, produces a situation in which the actions of one sector are planned and implemented separately from and with no reference to the other, resulting in a drastic reduction of the effectiveness of both.

It should finally be noted that in spite of the high productivity of Greek researchers, which is manifested in their relatively intense participation in "competitive" EU research programmes and in the high number of publications per researcher, the impact of these publications on international knowledge (the number of references to each publication) is low, while the number of commercial patents obtained from that knowledge is extremely low. These data underscore the qualitative delay of Greek research, as well as its lack of usable scientific and technical results—findings, facts that should not be ignored by the agencies that draw research policy.

The respective indicators indicate that the innovativeness and extroversion of enterprises stand below the EU average. This situation is indicative of the defensive strategy of sectors in decline, with limited potential to renew their product mix or service repertoire, and very little contribution to the production of new knowledge—a fundamental component of business strategy.

Additionally, the policies pursued to date are characterised by limited funding of innovation, compared with EU–25, insufficient coordination between the various public agencies involved in policy-making, and the dilution and fragmentation of the efforts in many operations, based on the separate funding of research and innovation extended to individual companies, and do not include a coordinated overall support extended to all partners planning and

implementing research and innovation, in all stages of the innovation procedure. A positive development in that direction was the introduction of measure 4.6 in the Review of the Operational Programme “Competitiveness” (EPAN), which serves to promote the strengthening of innovation in an integrated way. Under this Measure, the recent implementation of Actions favouring the creation of “Regional Innovation Centres” and of microelectronics cluster, is a positive step toward a systemic approach, a trend that will be strengthened during the Fourth Programming Period.

Overall, public policies have contributed positively to raising awareness among enterprises concerning the significance and consequences of RTD and innovation. Their impact is reflected in the improved capability for innovation among businesses, albeit not to a degree sufficient for bridging the gap between Greece and the EU average. During the last programming period in particular, policy measures supported a new entrepreneurial profile, and reoriented the strategic behaviour of enterprises toward more knowledge-intensive activities.

1.2.5. Competitiveness, state aid and foreign investments

Greek entrepreneurship was generally considered to depend to a major extent on state aid for its capital investments. This was the case in the past but it no longer is so. In Greece state aid to business is now 0.22% of the GDP (in 2003) compared to an average 0.40% in the EU–15. The decline rate of state aid is the second fastest—after Ireland—among all EU member states, fifteen times the EU–15 average in the period 1999 – 2003: from twice the EU average in 1992, the GDP share in state aid is now 45% of the average.

TABLE 25: STATE AID INDICATORS

	State aid as % of GDP, 2003	Variation, 1999-2003	Horizontal aid as % of total	as % of V.A. in manufacturing		Share of state aid by sector, 2003		
				1992	2003	manufacturing	services	agriculture
EU–15	0,40	-0,01	79	3,0	1,8	55	6	26
Belgium	0,24	-0,03	100	1,4	1,4	57	4	37
Denmark	0,49	-0,06	94	2,0	3,5	71	3	20
Germany	0,68	-0,03	73	3,4	2,3	62	5	12
Greece	0,22	-0,15	97	8,6	2,0	51	2	44
Spain	0,43	-0,07	63	1,2	1,7	49	2	18
France	0,31	-0,04	76	2,3	1,4	40	3	40
Ireland	0,31	-0,27	64	1,4	0,8	37	8	55
Italy	0,44	+0,02	96	5,5	2,3	74	6	16
Luxembourg	0,15	+0,00	100	3,3	1,4	51	-	49
Netherlands	0,11	-0,02	91	1,2	0,8	33	0	66
Austria	0,26	+0,01	99		1,3	36	3	60
Portugal	0,96	+0,10	19	1,3	1,1	14	63	22
Finland	0,36	-0,02	99		1,7	24	1	74
Sweden	0,39	+0,04	100		2,7	57	7	25
UK	0,19	+0,05	99	0,8	1,3	70	0	24

DG COMP, State Aids, Key Indicators, 04.05

Horizontal aid corresponds to 97% of total, compared with an EU–15 average of 79%, which shows that Greece is a country par excellence where sectoral policies are practically absent, compared to e.g. Germany (with horizontal support at 73% of total), France (76%), Spain (63%) and Ireland (64%). An indicative case is manufacturing – processing, where in 1992 Greece stood at the top of EU–15, while in 2003 it had dropped to half the EU–15 average (2% of value added, against 1.8%), reducing the intensity of aid to almost one – fifth. Several countries including Denmark, Germany, Italy and Sweden continue to support their secondary sector with more state aid than Greece does. Considering the small size—by European standards—of most Greek enterprises, in combination with the higher state aid percentages allowed for small enterprises, the revision of Community regulations (concentration of aid strictly to regions in greater need, with less state aid overall, non-eligibility of certain regions) although it does not represent a good change for certain regions, it is not going to be particularly negative in terms of strengthening entrepreneurship in Greece, since in eligible regions and for eligible actions, reduced state aid would need to be differentiated very little from the state aid that prevailed during the current programming period.

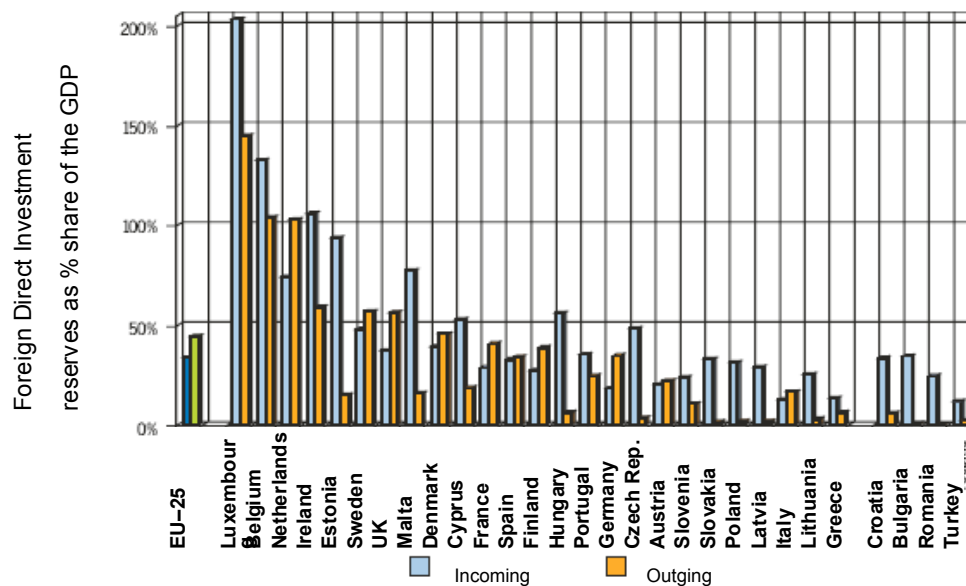
In all cases, a basic goal of development strategy during the programming period should be to substitute and/or supplement state aid with a higher inflow of Direct Foreign Investment. The statistical figures of FDIs are recorded in the context of monitoring the balance of payments according to the standards of respective manuals by the IMF and the OECD²² (IMF 1993; OECD 1999). Despite certain problems of methodology, data concerning DFI are still being widely used to evaluate the competitiveness of economies.

Although in recent years FDI has been increasing globally²³, Greece continues to lag behind in terms of FDI inflows and also in terms of total invested capital reserves, both in Greece and abroad. Greece is also in a very low position in terms of foreign investment reserves. UNCTAD data for 2005 indicate total incoming FDI reserves amounting to 13.2% of the GDP, and total outgoing FDI reserves amounting to 6.0% of same. Although these figures are significantly higher than the ones prevailing during the previous decade, their growth has been much slower in Greece than in the EU as a whole.

²² IMF (1993). Balance of Payments Manual. Fifth Edition & OECD (1999). Benchmark Definition of Foreign Direct Investment. Third Edition. Paris: Organisation for Economic Co-Operation and Development, in the Annual Report on Competitiveness 2006 by the Greek Ministry of Development.

²³ UNCTAD (2006). World Investment Report 2006 – FDI from Developing and Transition Economies: Implications for Development. New York: UNCTAD, in the Annual Report on Competitiveness 2006 by the Greek Ministry of Development.

FDI RESERVES in 2005 (% of GDP)



Source: UNCTAD (2006). *World Investment Report 2006 – FDI from Developing and Transition Economies: Implications for Development*. New York: UNCTAD, in the year 2006 Annual Report on Competitiveness by the Greek Ministry of Development.

Today foreign-owned businesses operating in the EU account for 33.5% of the GDP, while European FDI in foreign countries accounts for 44% of the GDP. The limited dynamic of FDI inflows in Greece points directly to the lack of competitiveness and attractiveness of the Greek economy, as the sectoral structure of global FDI flows has shifted away from the sectors where Greece had traditionally attracted investments. The most recent data about Greece announced by the Ministry of Economics (14 March 2007) indicate EURm 4,275 of FDI in 2006 compared with a mere EURm 488 in 2005. On the basis of the figures for gross fixed capital formation announced by the National Statistical Service of Greece, this change corresponds to an increase of the Greek share from 0.9 to 6.9% within 2006, a figure that is clearly better but still quite lower than the EU averages.

Considering the current international pattern of FDI traffic, it is objectively difficult for Greece to become a receiver of large flows of foreign investments, for a series of reasons: geographical distance from the main EU–15 market, small domestic market, cost competition and small domestic markets in neighbouring countries, identity of comparative advantages with current competitors (tourism), very frequent links of economic interests with geopolitical goals (as in energy and transport networks).

TABLE 26: DIRECT INVESTMENT FLOWS TO AND FROM OECD COUNTRIES
(BILLION USD)

Country	Inflows				Outflows		
	Total	2001	2002	2003	2001	2002	2003
USA	279,3	167,0	72,4	39,9	120,0	134,0	173,8
Luxembourg	190,3	-	117,1	73,2	-	126,2	81,8
France	146,4	50,5	48,9	47,0	86,8	49,5	57,3
The Netherlands	97,2	51,9	25,6	19,7	48,0	34,6	36,1
United Kingdom	94,3	52,7	27,0	14,6	28,9	35,2	55,3
Spain	89,5	28,0	35,9	25,6	33,1	31,5	23,4
Germany	70,0	21,1	36,0	12,9	36,9	8,6	2,6
Ireland	59,6	9,7	24,4	25,5	4,1	3,1	1,9
Canada	55,1	27,5	21,0	6,6	36,1	26,4	21,6
Mexico	51,7	26,6	14,4	10,7	4,4	1,0	-
Italy	46,5	14,9	14,6	17,0	21,5	17,1	9,1
Belgium	44,4	-	13,1	31,3	-	11,0	39,0
Australia	29,0	4,7	16,5	7,8	12,2	7,6	14,3
Sweden	26,9	11,9	11,6	3,4	6,4	10,7	10,6
Switzerland	26,8	8,9	5,7	12,2	18,2	7,6	10,9
Japan	21,7	6,2	9,2	6,3	38,4	32,3	28,8
Denmark	20,7	11,5	6,6	2,6	13,4	5,7	1,2
Czech Republic	16,7	5,6	8,5	2,6	0,2	0,2	0,2
Finland	14,4	3,7	7,9	2,8	8,4	7,6	-7,4
Poland	14,0	5,7	4,1	4,2	-0,1	0,2	0,4
Austria	13,8	5,9	1,0	6,9	3,1	5,3	7,1
Hungary	9,2	3,9	2,8	2,5	0,4	0,3	1,6
Korea	9,1	3,5	2,4	3,2	2,4	2,6	3,4
Portugal	8,7	5,9	1,8	1,0	7,6	3,3	0,1
Slovakia	6,3	1,6	4,1	0,6	0,1	0,0	0,0
Turkey	4,9	3,3	1,0	0,6	0,5	0,2	0,5
Greece	2,4	1,6	0,1	0,7	0,6	0,7	0,0
Total OECD	1544,3	624,9	535,0	384,4	661,9	566,7	576,3

Source: OECD

Foreign investments are reasonably expected in sectors related to the SGEIs and thus, although in the period 1996 – 2004 the investment plans governed by the law on investment incentives included EURm 188 of non-Greek capital, leveraged an additional EURm 1,078 and projected 9,500 new jobs²⁴, the stock increases of Greek Public Enterprises and Organisations, and Banks, attracted much greater capital investments through the Stock Exchange²⁵.

²⁴ Source: Greek Investment Centre, www.elke.gr

²⁵ Non-Greek investors hold about 25% of the shares of the Greek power utility DEH, (Athens Daily *To Vima*, 5 February 2006) and over 39% of the shares of the National Bank of Greece (Source: the bank's Chairman of the Board address at the 2nd annual general assembly of shareholders, 23 May 2006). The problem of indirect investments is their high mobility. It is interesting to note the ranking of the major foreign investors in Greece in 2004: in the top five places are Vodafone (acquisition of Greek company), Societe Generale (acquisition), First Data (acquisition),

Specific ways ought to be developed so that state aid will yield more, will be centred in sectors – divisions of production and business activities or areas where they will be able to yield a multiplication effect, and even more to favour international collaborations, and to leverage private funding. The last requirement induces a re-orientation of private savings (from being invested in housing and durable consumer goods) and consequently of banking activity (from commercial, home and consumer credit, to undertaking business risks, participation in and support for public-private partnerships). It also raises urgently the issue of developing new financing instruments, and reorganizing the supporting structures of entrepreneurship.

1.2.6. *Competitiveness and the dimension of economic sectors and divisions*

Horizontal policies and external factors (e.g. the directions of fiscal and foreign exchange policies) are a framework that favours Greece in the long term but constrain current and short – term developments: the strong EU-12 currency of hinders Greek exports in low value added sectors; reduced Greek state aid favours non-EU countries including its neighbours that are candidates for accession; the “race” towards ICT and Information Society ensues in an initial increase of imports, etc. If Greece was to differentiate its policies by sectors and divisions of the economy, it would run against the “horizontal” approach of the EU that acknowledges enterprise-targeting policies, rather than industrial policies. The relevant discussion has begun, centred on productivity and sectoral composition (high – medium – low value added sectors)²⁶, which among other things illuminates the dismal position of (e.g.) Greek manufacturing, characterised by a sectoral structure with small participation of high value added and high ICT integration sectors, lagging behind the respective sector of Portugal, resembling more that of Spain.

Greek economy is in urgent need of upgrading to [new] higher value added sectors, as well as to higher value added in its traditional divisions. Having a look at the NACE classification of sections and divisions, in Greece manufacturing has a higher unit value ratio than e.g. Germany in food – beverages – tobacco, paper and paper products, medical instruments and precision instruments; chemical products, transport vehicles and furniture stand at tolerable levels; while textiles, clothing manufacture, publishing and printing, rubber and synthetic products, and non-metal minerals²⁷ are at low levels—despite the fact that Greek manufacturing used to be specialized in these latter divisions, which accounted for a large part of local employment in several areas of Greece.

In relation to that, it is noted that the basic sectoral characteristics of the Greek manufacturing sector show (i) a decline in textile materials, clothing, leather processing and footwear, wood and cork, other transport equipment, paper and paper products, office equipment - computers, furniture – other manufacturing, radio – television and communications appliances; (ii) a stable condition (without much development over the average) in the divisions of food and beverages, non - metal mineral products, machinery and equipment, electrical machines - appliances etc., coke and refined petroleum products; and (iii) growth in tobacco, printing - publishing, chemical products, rubber and plastic products, basic metals, manufactured metal products. The overall result is the appearance of

PanEuropean Oil and Industrial Holdings (participation in capital increase), Dixons (acquisition). Source: *Southeast Europe Investment Guide*, 2006.

²⁶ EC, DG Enterprise, *EU Productivity and Competitiveness: an Industry Perspective*, 2003. That point of view is more flexible when the goal is the recovery of divisions that are of great interest for European competitiveness, or for maintaining a sound production structure in large EU member States. In all cases, the implementation of “horizontal” policies over several years was not sufficient to reverse the de-industrialization trend throughout the EU.

²⁷ Ibid.

a trend to “de-industrialisation”, with fewer manufacturing plants and of course also less employment.

TABLE 27: DEVELOPMENTS IN MANUFACTURING PLANTS AND EMPLOYMENT

Period	Manufacturing plants	Employment
1995-2000	-13.7%	-8.4%
2000-2002	-23.8%	-1.4%
1995-2002	-34.2%	-9.7%

Source: National Statistical Service of Greece, Chamber of Commerce and Industry data, 2003

In 2006, tourism accounted for 15.1% of the GDP and 15.9% of employment in Greece. Although these figures vary depending on the source and calculation method of the tourist product, they attest to the fact that tourism is one of the more important productive activities of the Greek economy.

TABLE 28 : CONTRIBUTION OF TOURISM TO THE GDP AND EMPLOYMENT

Country	% of GDP		% of total employment	
	2001	2006	2001	2006
Greece	15.0%	15.1%	17.4%	15.9%
Spain	18.4%	17.8%	20.1%	19.1%
Portugal	15.4%	15.5%	17.0%	17.7%
Germany	9.9%	9.3%	10.8%	10.1%
France	12.3%	11.4%	13.9%	13.8%
Luxembourg	12.4%	9.4%	14.5%	13.4%
Italy	11.4%	10.8%	12.2%	11.9%
Austria	14.9%	16.6%	16.8%	19.1%
United Kingdom	10.9%	9.4%	10.2%	8.6%
Belgium	10.3%	9.4%	11.0%	10.6%
The Netherlands	9.8%	8.5%	9.7%	8.2%
Denmark	8.7%	8.0%	8.8%	8.1%
Ireland	8.5%	7.7%	7.7%	7.2%
Sweden	7.5%	7.9%	7.2%	8.0%
Finland	11.5%	9.1%	12.0%	9.7%

Source: World Travel & Tourism Council, 2006, in Alpha Bank, Survey of Tourism: Summer Holidays for Ever; 5/10/2006

The conditions emerging internationally for tourism are favourable. In the 1980s revenue from services in tourism amounted to 1% of the global economy, while today they are about 1.5%²⁸. It follows that the contribution of tourism to the development dynamic of the Greek economy can be increased even more.

The competitiveness of the Greek tourist industry is faced with significant challenges, both due to its structural features and because of international competition. The trends currently prevailing in the international tourist environment, and intense competitive conditions, demand that markets become more compartmented, with special forms of tourism responding to the individual needs of modern travellers, and to the particular features and development potential of particular destinations.

Special forms of tourism accomplish an expansion and enrichment of the tourist product, exploit resources beyond the traditional Greek “sun & sea” model and encourage year-round activities.

²⁸ Eurobank EFG, Economy and the Markets, Issue 8, 25 October 2006

Year-round tourism would reduce the seasonal character of tourist demand, would distribute tourism more evenly in space and time, and would decongest saturated tourist destinations.

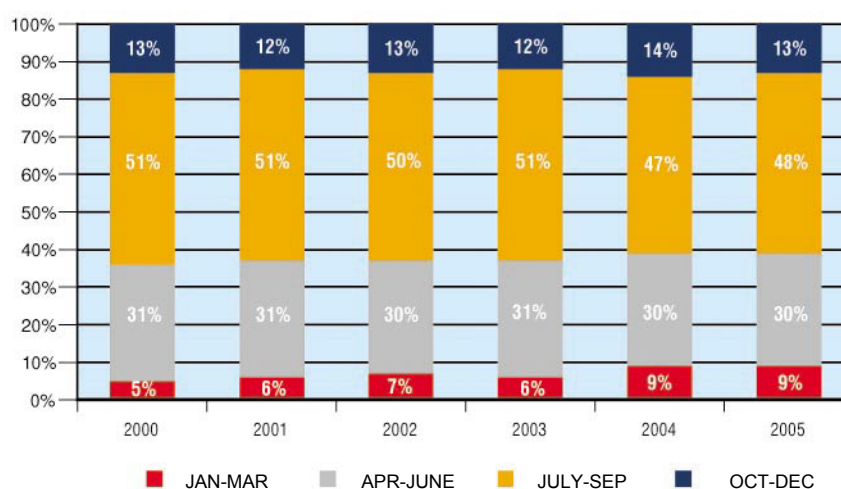
The basic development axis for special forms of tourism are as follows:

- Spa tourism, taking advantage of the country's natural mineral springs managed by the Greek National Tourism Organisation (third-party management by ministerial decision), health, beauty, well-being and thalassotherapy tourism.
- Cultural tourism, urban tourism, congress tourism, exhibition tourism, sports tourism, city breaks, whose development is centred in urban areas.
- Environmental tourism, nature adventure and extreme sports, whose development is centred in rural areas.
- Sea tourism, including scuba diving and sailing

The aforementioned forms of tourism strengthen the local economies, especially in disadvantaged areas without other development potential. They create new jobs and place priority on public works (roads, entry points etc.) as well as on the creation of special infrastructures for tourism.

In the period 2000 – 2004 the arrivals of foreign tourists in hotels and similar accommodation facilities dropped, unlike the period 1990 – 2000 when they had increased. Domestic tourism presents similar trends. The number of overnight stays days dropped. After 2005 and through 2006 the number of arrivals and overnight stays increased, but the Greek share in global arrivals of tourists has declined ²⁹. The Greek share in global revenue from tourism has remained steady, a fact that could be interpreted positively, as it ensues to a large extent from a turn toward new higher quality services. However, the number of overnight stays remains concentrated in areas that are closely associated with the traditional “sun and sea” tourist model (the Aegean and Ionian Islands, and Crete account for 70.9% of all overnight stays, while the Athens region accounts for another 9.8%) and the arrivals of foreign tourists are concentrated in the period between July and September, a traditional space and time distribution that still characterises Greek tourism as a whole.

ARRIVALS IN GREECE BY QUARTER, 2000-2005



Source: SETE (Association of Greek Tourist Enterprises), in Alpha Bank, Survey of Tourism: Summer Holidays for Ever; 5/10/2006

²⁹ Eurostat Database, 2006; Eurobank EFG, Economy and the Markets, Issue 8, 25 October 2006

The emergence of new tourist destinations in the Mediterranean region (Turkey, Egypt, Croatia) which meritoriously promote the same tourist product as Greece, along with macro-economic parameters such as the high Euro vs. US Dollar parity, make it necessary for the Greek tourist industry to become more competitive.

Greek enterprises have been trying to reduce seasonality and to expand the spatial distribution and the thematic of the Greek tourist product, in order to improve their place in international competition. Based on the above, the systematic turn of recent years toward the qualitative upgrading and differentiation of the tourist product is a one way road and is accomplished through the upgrading of tourist services, especially hotel capacity, and at the same time through the development of special forms of tourism in situations that offer real potential (urban tourism, especially with the infrastructure created for the 2004 Olympics, marine tourism, environmental tourism, agro-tourism, etc.).

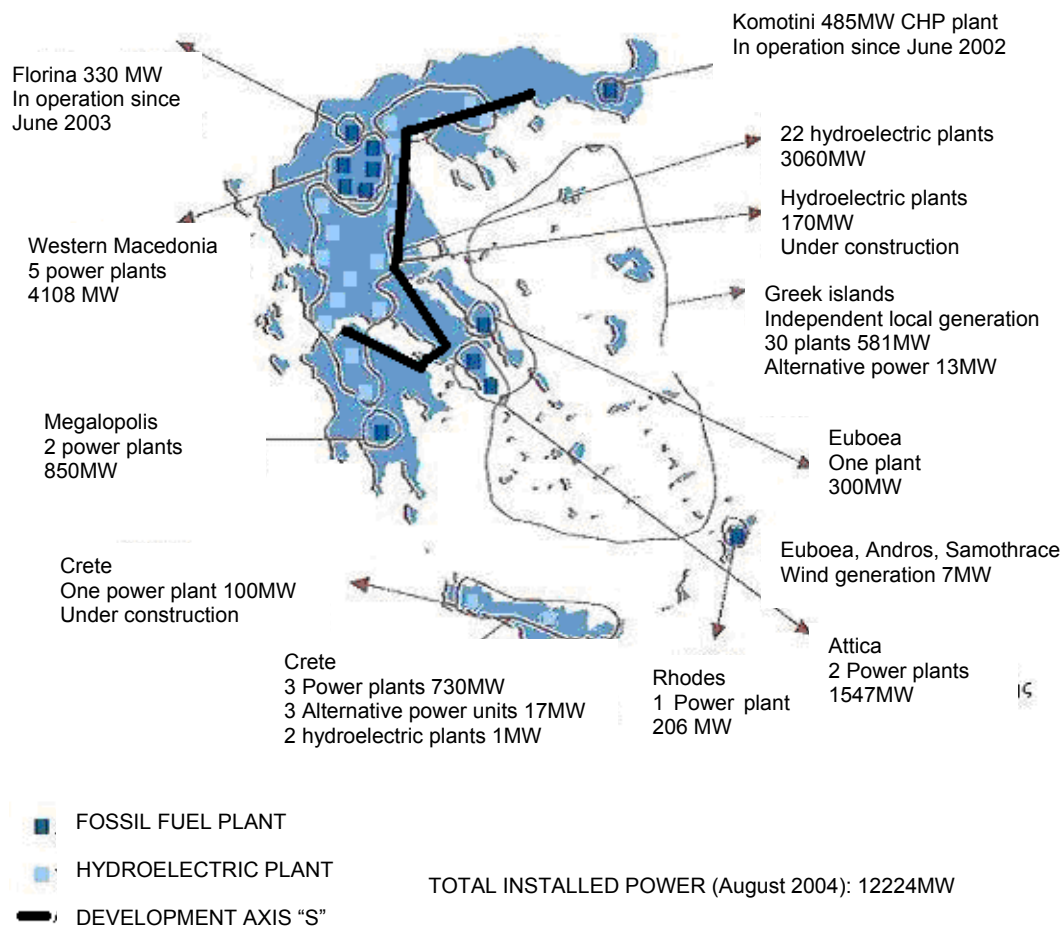
The diagram above indicates a steady improvement of the arrivals figures in the quarter from January to March, a fact that could be attributed to the measures dealing with seasonal tourism that were implemented in recent years.

1.2.7. Competitiveness and Power Infrastructure

Improved accessibility of general economic interest networks and services in the energy sector is a necessary tool for increasing the Greek economy's competitiveness, in view of the fact that it creates more favourable conditions for the development of entrepreneurial activity in conditions of competition. There are actions that have been developed already and have changed the Greek landscape to a substantial degree: a new genuine domestic energy market is being created, in order for competitiveness to be increased, within the framework of the Lisbon Strategy, so as to ensure the provision of high quality services at affordable prices; very important infrastructures and high quality networks that contribute substantially to the environment are being built (given that Greece is adopting the necessary measures to comply with the Kyoto protocol); a social model that ensures high quality of services and guarantees the fundamental rights of consumers is being gradually developed.

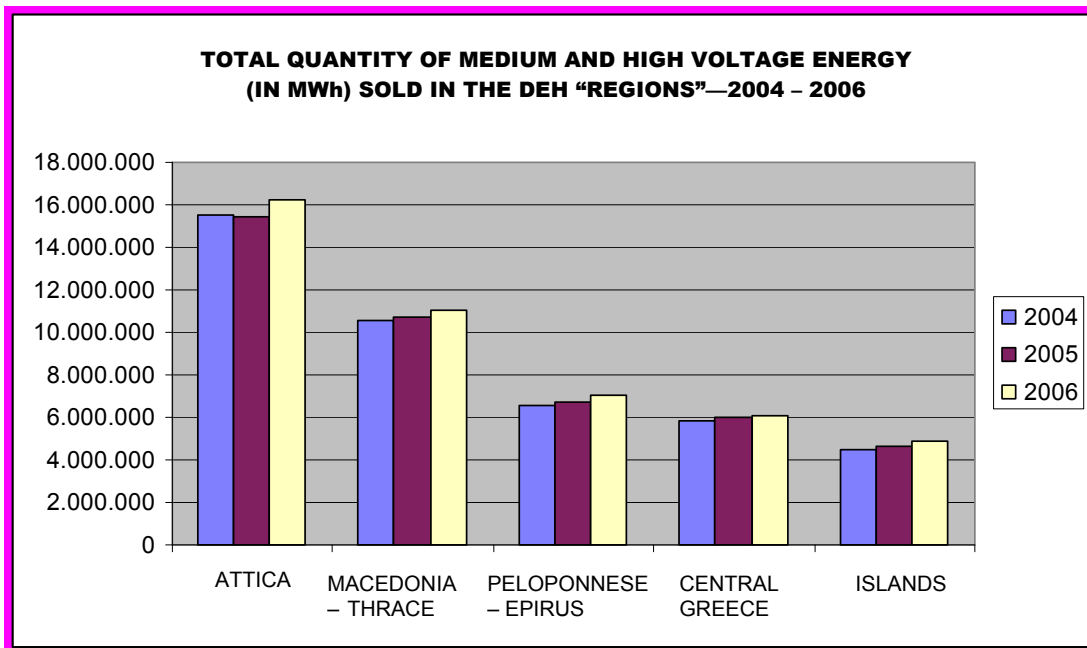
The geographic distribution of the power generation system is illustrated in the map below, which highlights the concentration of power generation and consumption along the so-called "S" development axis traversing Greece from the northern Peloponnese to the city of Kavalla.

FOSSIL FUEL AND HYDROELECTRIC GENERATION PLANTS, AND THE “S” DEVELOPMENT AXIS OF GREECE



Source: Ministry of Macedonia and Thrace (2004), Strategic Plan for Northern Greece 2007-2013: Phase I, Thessaloniki; data processed by the authors

In reference to power consumption, 2004 – 2006 data obtained from the Greek power utility DEH indicate that the highest figures for distributed (sold) medium and low voltage power occurred in Attica (NUTS II territorial division Attica) followed in descending order by Macedonia – Thrace (NUTS II territorial divisions Western Macedonia, Central Macedonia, Eastern Macedonia & Thrace), Peloponnese – Epirus (NUTS II territorial divisions Epirus, Western Greece, Peloponnese, Ionian Islands), Central Greece (NUTS II territorial divisions Thessaly and Sterea Hellas) and the islands (NUTS II territorial divisions Northern Aegean, Southern Aegean, Crete). The quantity of medium and low voltage energy distributed is generally low but increasing steadily in all DEH power distribution “regions”. The average annual variation of distributed medium and low voltage power during the period 2004 – 2006 (data available) is 2.66%.



In reference to the distributed (sold) high voltage power, the total figure for 2006 is 7,775 gWh. However, a significant part (46.97%) of the distributed high voltage power represents sales to two enterprises. The greatest part of the activities of those two enterprises is situated in the Sterea Hellas region. During the 2002 – 2006 period, for which we have data on high voltage, the average annual variation is 2.98%.

In view of the fact that the requirements that concern all the security aspects of power generation and distribution keep increasing, and that impact on the environment is substantial, as a particularly high percentage of man-made CO₂ emissions originate in power generation, it is necessary to implement a strategy in the energy sector focusing on a series of priorities:

- ✓ Contribution to EU competitiveness by integrating the internal market, in order to achieve a functional electrical power and natural gas internal market.
- ✓ Better protection of citizens by assuring effective services in the framework of opening the electrical power and natural gas market.
- ✓ Sustainable development encouraged by promoting RES in order to increase the share of “green” power in the market, and reduce demand for energy, by means of power saving and efficiency policies.

In view of the fact that the principal feature of the Greek Electrical Power System is the great concentration of fossil fuel power stations in northern Greece (Western Macedonia), while the main consumption areas are in southern Greece (Attica and the Peloponnese), there is a great regional imbalance between power generation and power consumption, resulting in distribution safety problems, mostly voltage instability, and other ensuing difficulties in maintaining satisfactory voltage in the Southern System during peak power demand hours.

This consideration, in combination with the fact that connections to the international grid are in the North, and that connections from the mainland to the islands are limited, intensifies the necessity of implementing modern power infrastructures and private energy investments in order to further fortify the electrical power generation and distribution system.

In reference to natural gas, 2005 consumption in Greece amounted to 2.7 billion Nm³/year while in 2006, base year of the 2007 – 2013 programming period, it is expected to exceed 3.2 billion Nm³/year. The share of natural gas in gross domestic consumption amounted to 7.5% in 2005 and is expected to rise to 17% in 2010 and 19% in 2015, already contributing to reduce Greece's dependence on petroleum and to environmental upgrading.

The share of Renewable Energy Sources (RES) in gross domestic power consumption was 5.3% in 2005, and is expected to increase to 6.1% in 2010 and 6.6% in 2015. The respective share of Renewable Energy Sources in power generation was 11.6% in 2005, and is expected to increase to 16.2% in 2010, and 17.9% in 2015.

The estimates in the preceding paragraphs were based on the projected energy balances arising from the scenario "Policy for Energy and the Environment" of the Ministry of Development (November 2006). However, if we take into account the "Basic Scenario of Potential Power Generation from RES in 2010", which is described in the 3rd National Report on the Penetration Level of Renewable Energy in 2010, in accordance with Directive 2001/77/EC, Article 3, the share of Renewable Energy Sources in electric power production could reach 18.1% in 2010. The goal of a 20% RES share in power production by 2010 could be approached even more if we consider that the basic scenario of the 3rd National report did not take into account the measures to be included in the National Action Plan for Energy Efficiency, whose implementation will start in 2008, and also the significant investor interest developed during 2006 for the installation of photovoltaic systems producing hundreds of MW all over Greece.

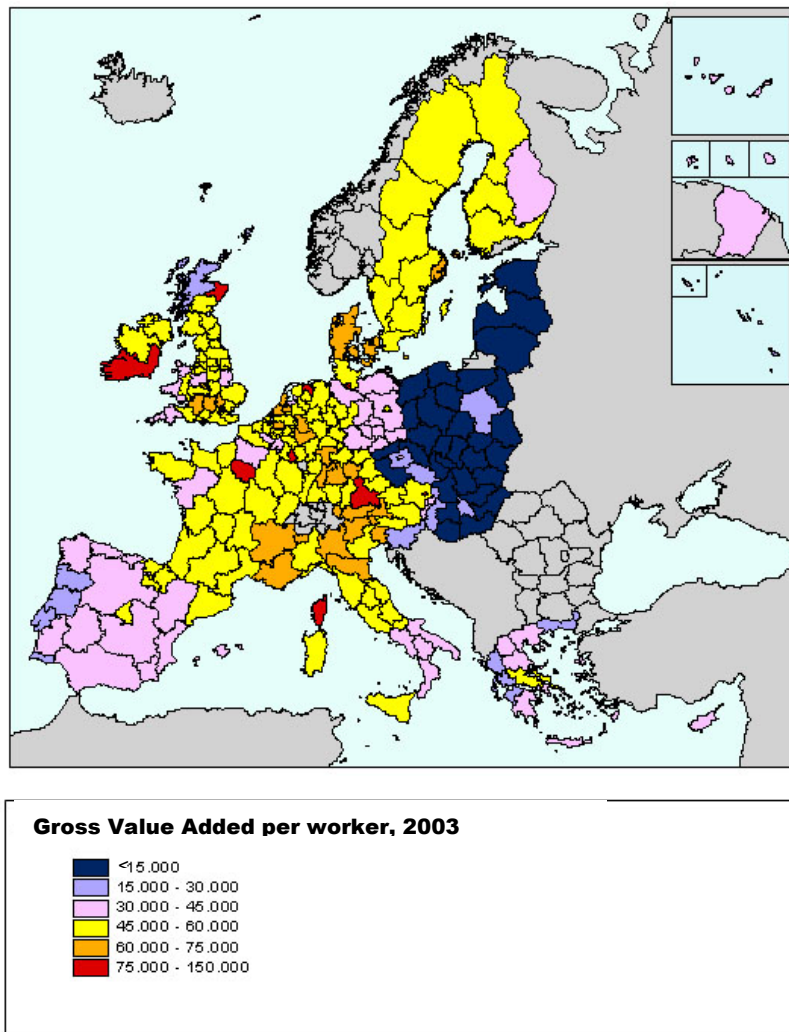
1.2.8. Competitiveness and the Regional Dimension

Because of their generally small economic size the Greek Regions (other than Attica) are vulnerable to intra-EU competition, their productivity ranging low compared to the EU average. Sterea Hellas is the only region marking a satisfactory value.

TABLE 29: AVERAGE ECONOMIC SIZE OF REGIONS IN THE EU

	2002 Total Gross Product of Region million PPP	2000 Gross Fixed Capital Investments in EURm
Austria	23,246	5,514
Belgium	23,206	4,376
France	56,311	10,958
Germany	46,281	11,011
Greece	13,862	2,117
Ireland	55,127	12,376
Italy	62,800	10,997
Hungary	17,993	1,556
Poland	23,084	2,658
Portugal	24,059	4,630
Sweden	27,107	5,758
Czech Republic	18,252	2,065
Finland	24,965	6,438

Eurostat 01.05, data processed by authors



In contrast to some other European regions, in Greece there is no direct correlation of the growth rate with the intensity of R&T and employment in high tech sectors. It should however be considered that up to now Research has been receiving very low funding, under 1% of the regions' GDP, and so Research could not become a driving force that would create differentiated growth rates. Higher productivity seems to have resulted more from the modernisation of production structures and less from the development of innovation or from differentiation.

In view of the fact that in Greece the dominant disparities are intra-regional, the Greek strategy for competitiveness – extroversion – entrepreneurship ought to be different in each Region in order to avoid producing inter-regional imbalances. The emergence of highly competitive regional poles will fortify national competitiveness as a whole. Regardless of the specific spatial implementation of the Programme, it is imperative to connect the general strategy with regional strategies, including the implementation of joint actions in the country's "transitional" and other Regions. As regards the regional dimension of the competitiveness strategy, we ought to take into account the current concentration of the productive sectors, because it gives rise to a specific distribution of the needs of enterprises, and thus also the necessary intensity and extent of interventions. Of the total Value Added of the Greek secondary sector, entrepreneurial *par excellence*, 50% is concentrated in Attica and Central Macedonia, while another 63% is distributed in the same regions and in Sterea Hellas, the region adjacent to Attica. Attica and Central Macedonia concentrate also 50% of the tertiary sector.

TABLE 30: THE REGIONS' CONTRIBUTION TO GROSS VALUE ADDED, 2004

	Primary	Secondary	Tertiary
Eastern Macedonia & Thrace	9.6%	5.0%	3.4%
Central Macedonia	18.6%	17.0%	16.7%
Western Macedonia	5.2%	4.0%	2.2%
Thessaly	13.4%	7.9%	5.1%
Epirus	3.2%	2.1%	2.7%
Ionian Islands	2.1%	1.0%	2.0%
Western Greece	9.3%	4.1%	5.1%
Stereia Hellas	9.6%	14.1%	4.8%
Peloponnese	10.8%	6.7%	4.1%
Attica	3.3%	32.5%	42.9%
Northern Aegean	2.9%	2.5%	1.6%
Southern Aegean	3.8%	0.9%	3.4%
Crete	8.2%	2.2%	6.1%
<i>Total</i>	<i>100.0%</i>	<i>100.0%</i>	<i>100.0%</i>

National Statistical Service of Greece, 2005

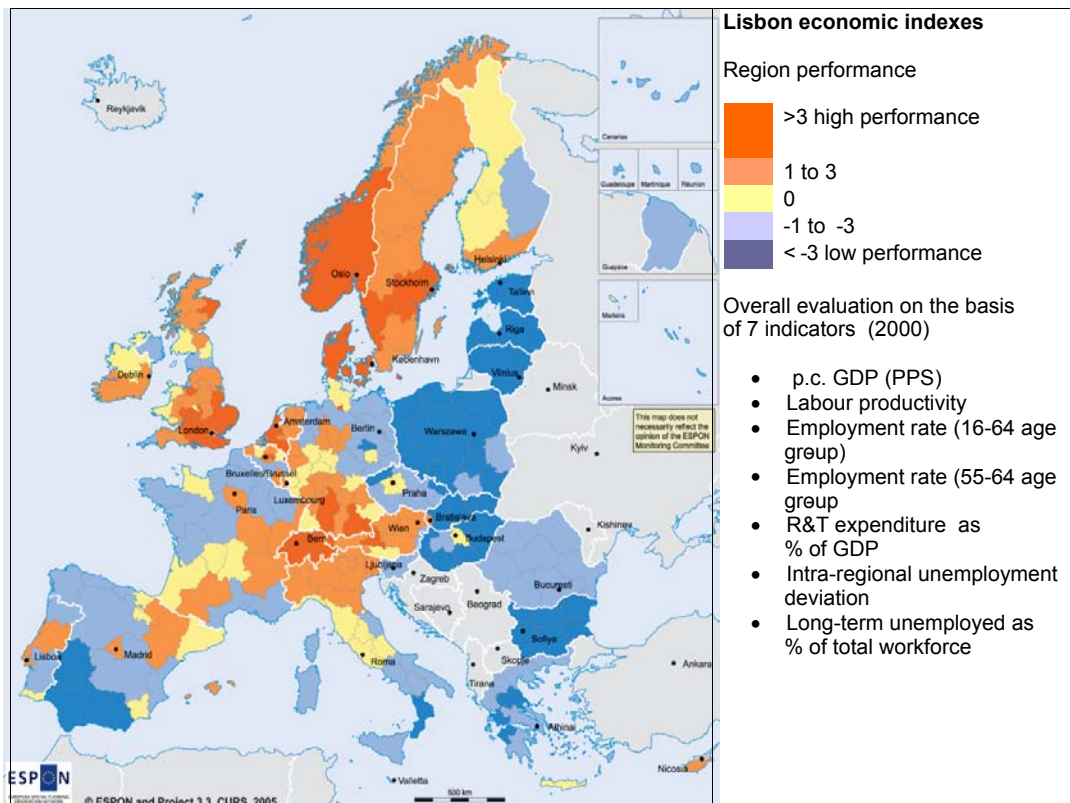
The five *Phasing Out* Regions account for 69% of the secondary sector and for 70% of the tertiary sector in Greece. Since the regulations of the Structural Funds require strictly separate distribution of the funds disbursed to the *Phasing Out* Regions, during 2007 – 2013 five Greek regions will receive funding exclusively from the respective Regional Programmes and not from sectoral Operational Programmes such as the OP “Competitiveness and Entrepreneurship”. This “locking-up” of funds means that all interventions planned and implemented by sectoral ministries in the *Phasing Out* Regions must be included in the development strategy of each *Phasing Out* Region, regardless whether the said interventions contribute exclusively to development in that Region or whether they simply “transit” through that Region in pursuit of broader development goals. This procedure will allow, inter alia, for unified management, *ex-ante* assessment, and *ex-post* evaluation of the interventions’ achievements applying complex parameters and indicators such as the GDP, extroversion, energy performance, environmental commitments, employment, and the overall calculation of each sector’s contribution to achieving the Lisbon targets (earmarking)³⁰.

It should be noted that out of the regionally localised expenses under the Operational Programme “Competitiveness” 2000 – 2006, the *Phasing Out* Regions received 67% of their expenditures for manufacturing, 76% of their expenditures for RTD, and 60% of their expenditures for commerce³¹.

The performance of the Greek Regions in terms of the Lisbon Agenda economic indexes remained low or very low. Crete was the only region showing a “neutral” performance:

³⁰ E.g., the (feasible) extroversion indicator of a Region (records of exports through customs offices based therein) will include no relevant values if they incorporate the performance of the agricultural sector as well, or if they don’t take into account the exports of other units of the enterprises established in the Region. Additionally, it is nearly impossible to calculate the effects that interventions in the secondary and/or tertiary sectors produce on primary sector employment.

³¹ Interim calculations, Special Management Authority of the Operational Programme “Competitiveness”, 2006



Despite the diversity of their features such as geography (highland – lowland – island), population density (densely – sparsely populated), productive structure (agricultural – tourist – industrial – urban), Greek Regions present only minor variations in terms of development figures, and disparities occur to a degree smaller than in other EU member states. The ratio of *per capita* revenue between the poorest and the wealthiest Greek region is lower than those of Spain, Portugal, Italy Germany, France, and the UK, while it is higher than those of the Netherlands and Sweden.

There are two factors that might account for smaller intra-regional disparities. To begin with, local development in Greece depends to a great extent on the choices of central administration, as there is little decentralisation – delegation of powers to regional or local administration (especially in connection with the mechanisms that shape the competitiveness of regions, which are fully regulated at the central level). On another level, having analysed the regional policy mechanisms as they were applied during the last two decades, we see that disparities have persisted in spite of appearances. Rising revenues were often partially the result of transfer payments (under the CAP, the Greek State Investment Programme, the State-Operated Enterprises, and other public spending categories), while the productive structures keep presenting traditional deficits in competitiveness and poor adjustment to developments in EU and world economies. In this way the structural shortcomings of the Greek economy are encountered almost in their totality in all the Regions, and despite an emerging “statistical” differentiation among the Regions as to their eligibility under the Objectives of the Structural Funds of the Fourth Programming Period, there are no clear indications with which to identify intense differentiations in terms of affluence among the Greek regions, except for Attica and the Southern Aegean region.

Besides Attica, the Southern Aegean and Central Macedonia, all other Greek Regions present primary sector specialisation. The regions with secondary sector specialisation include Western Macedonia (power generation), Sterea Hellas (industrial conglomerates in

the vicinity of Attica), Central Macedonia and Attica. The regions with tertiary sector specialisation include Attica and the Southern Aegean (tourism). Other regions with a high tertiary sector coefficient (near the threshold of specialisation) include Central Macedonia, the Ionian Islands and the Northern Aegean. On the basis of employment data, specialisation in the Regions has not changed with time. All regions with the exception of Attica, Central Macedonia and Crete present a high specialisation in constructions. The construction specialisation of Regions with a small population is interpreted as a direct consequence of the contribution of EU funds to road construction and other transport projects. Regions with specialisation in industry include Attica, Central Macedonia, Eastern Macedonia and Thrace, Sterea Hellas, the Southern Aegean and the Peloponnese; regions specialising in energy (power production) include Western Macedonia and the Peloponnese (lignite mining and power generation), Attica (power management services), and the Southern Aegean (independent power generation, wind generation). Attica is the only Region presenting specialization in all tertiary sector divisions (Banking – Insurance, Health, Education, and Public Administration).

Concerning specifically the parameter of innovation, the performance is disappointing³².

TABLE 31: REGIONAL PERFORMANCE IN INNOVATION (2003)

	RNSII	RSII	RRSII
Eastern Macedonia & Thrace	0.37	0.04	0.21
Central Macedonia	0.62	0.15	0.39
Western Macedonia	0.16	0.03	0.10
Thessaly	0.22	0.05	0.14
Epirus	0.29	0.09	0.19
Sterea Hellas	0.20	0.01	0.11
Ionian Islands	0.00	0.00	0.00
Western Greece	0.56	0.09	0.33
Peloponnese	0.26	0.02	0.14
Attica	1.00	0.21	0.61
Northern Aegean	0.25	0.09	0.17
Southern Aegean	0.29	0.02	0.16
Crete	0.31	0.03	0.17

Source: EUROPEAN INNOVATION SCOREBOARD 2003

The overall effect is the very low values in all the indicators concerning competitiveness, compared to the average EU-25 region:

³² Regional National Summary Innovation Index – RNSII (or SII – 1): the innovation index (scale) of a Region compared with the Region with the best performance in the same country, calculated by evaluating 13 innovation coefficients.
Regional Summary Innovation Index – RSII (formally SII – 2) : the innovation index (scale) of a Region compared with the Region with the best performance in the EU,
Regional Relative Summary Innovation Index – RRSII: the average value of the RNSII and RSII indicators.

TABLE 32: GREEK REGIONS COMPARED WITH THE AVERAGE EU-25 REGION (=100)

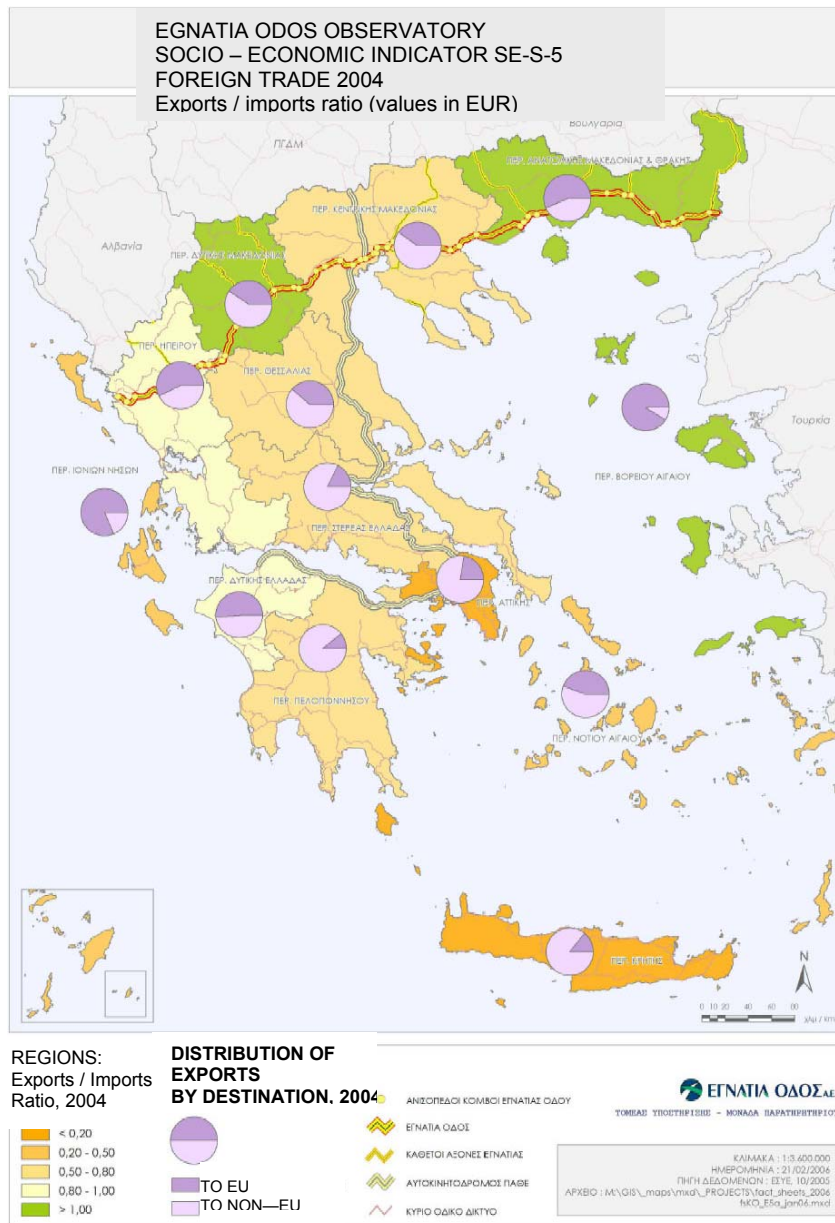
	2003 workforce &	2003 workforce popul 15-64 %	2003 /women unempl %	2003 age < 25 unempl %	2003 unempl %	2002 per capita GDP in PPS	2000-2003 average GDP change per year	1999 R&T expend EURm
Eastern Macedonia & Thrace	27.5	96.2	151.2	121.5	114.3	61.5	70.7	3.4
Central Macedonia	88.1	91.3	155.7	128.3	112.8	82.1	125.0	15.7
Western Macedonia	13.1	91.6	257.1	202.4	178.9	83.8	105.6	0.3
Thessaly	34.8	96.4	158.1	144.0	108.2	67.4	17.8	2.7
Epirus	15.6	92.5	176.6	178.1	122.7	64.5	105.9	3.2
Ionian islands	10.0	97.6	138.4	201.0	122.4	70.4	101.0	0.3
Western Greece	31.4	90.3	145.1	156.5	99.2	60.7	80.6	7.1
Stereia Hellas	26.4	95.0	128.9	115.7	96.0	112.9	115.5	2.1
Peloponnese	31.0	103.7	105.4	137.7	85.3	80.3	152.6	3.4
Attica	200.5	91.1	124.4	119.7	96.8	85.6	138.8	52.1
Northern Aegean	8.4	82.4	129.1	-	81.9	82.4	218.4	0.6
Southern Aegean	15.0	94.2	171.7	116.2	121.0	94.9	122.0	0.3
Crete	30.4	102.7	110.3	111.3	75.4	78.2	95.4	8.0

	1999 business R&D exp (% of GDP)	2003 Human resources in R&T, % population	2002 EPO Patents (per million population)	2003 Higher education, age 25-64 per 1,000 persons.	2003 Average work hours per week	2002 % pop w tertiary educ.	2002 Emp h/med tech manuf (% of total workforce)	2002 Emp h-tech serv (% of total workforce)
East. Macedonia and Thrace	11.8	53.3	0.3	17.7	116.8	61.7	14.8	17.8
Central Macedonia	10.7	74.2	6.5	82.6	114.9	92.4	25.4	53.4
Western Macedonia	1.1	51.4	0.0	8.3	111.0	65.3	7.9	38.0
Thessaly	5.4	61.7	1.3	27.0	118.4	70.7	20.2	27.4
Epirus	3.2	65.1	6.7	12.9	115.7	71.0	8.3	38.0
Ionian Islands	0.0	46.5	0.0	5.2	119.7	51.0	2.1	19.5
Western Greece	11.8	55.2	3.1	20.4	113.1	56.0	17.8	42.1
Stereia Hellas	18.2	41.3	3.1	13.8	120.5	37.0	45.0	25.7
Peloponnese	43.9	50.2	1.4	16.2	114.9	63.4	14.3	29.1
Attica	35.3	100.5	10.0	240.2	110.7	113.2	55.7	94.1
Northern Aegean	1.1	48.2	0.0	5.9	116.3	53.9	6.9	53.4
Southern Aegean	2.1	44.5	2.5	7.7	119.4	48.1	14.2	42.1
Crete	4.3	61.0	10.7	21.5	111.8	79.8	3.6	32.9

Source: EUROSTAT, data processed by BCS

Considering the conditions presented above, different regional economic structures present different degrees of extroversion (see following map), with Central Macedonia recording the highest degree of extroversion, followed -in descending order- by Eastern Macedonia & Thrace, Attica and the Peloponnese (above the average Greek extroversion index) and with the Ionian Islands, Crete and Western Greece improving their performance. Similarly, their

overall competitiveness, expressed as the exports / imports ratio, is different. The performance of Eastern Macedonia & Thrace, Western Macedonia and the Northern Aegean shows a ratio higher than unity; Western Greece and Epirus are better off than the Greek average; while the lowest ratio occurs in Crete and (mostly) the great consumer hub of Greece, the Attica region.



1.2.9. Competitiveness and the Lisbon Agenda

Greece presents low values in all the Lisbon Agenda indexes, ranking 22nd among the EU–25 member states. That ranking does not correspond to the country's level of development: in the recent period Greece marked a GDP growth rate that was often three times the average in the Eurozone (EU–12). Ireland, which held the EU-15 highest growth rate for fifteen years, ranked 15th ³³.

TABLE 33: LISBON AGENDA TARGETS

		Sub-indexes									
	Overall ranking	GDP increase versus EU-25	GDP increase versus EU-12	Information Society	Innovation, R&D	Liberalization	Network Industries	Financial Services	Enterprise	Social Inclusion	Sustainable Development
Finland	1	14	4	1	1	1	4	1	3	2	1
Denmark	2	20		3	4	2	1	3	2	1	4
Sweden	3	13		2	2	6	2	4	5	3	3
UK	4	15		6	6	3	8	2	1	8	7
Netherlands	5	21	9	4	7	5	7	7	9	4	6
Germany	6	22	10	7	3	8	3	8	12	15	2
Luxembourg	7	10	3	5	16	4	5	5	6	5	8
France	8	19	8	10	5	7	6	6	11	10	9
Austria	9	18	7	9	9	10	9	10	16	7	5
Belgium	10	17	6	14	8	9	10	12	10	6	10
Ireland	11	9	2	13	10	12	18	9	4	11	17
Estonia	12	2		8	15	15	17	11	7	18	16
Spain	13	16	5	17	11	11	12	14	15	14	15
Italy	14	24	12	15	13	14	13	15	25	17	11
Slovenia	15	10		12	12	19	14	20	23	16	12
Latvia	16	1		18	14	13	23	18	8	12	18
Portugal	17	23	11	16	20	18	11	16	19	20	19
Czech Repub.	19	7		19	22	21	15	24	17	13	14
Hungary	20	6		22	19	17	20	17	13	19	21
Lithuania	21	3		20	17	16	21	21	14	24	20
GREECE	22	8	1	23	21	22	16	19	22	21	22
Slovakia	23	4		21	23	23	22	22	27	22	13
Poland	24	5		24	18	24	25	23	26	26	23

Source: World Economic Forum, 2004

The development model upon which the growth of the Greek economy has been based in recent decades is not fully compatible with the Lisbon Strategy, primarily with the components of the “knowledge economy” and environmental “sustainability”. The Greek economy is growing at an extremely rapid rate thanks to low knowledge intensity activities

³³ Detailed analysis in: Greek Ministry of Development, BCS - REMACO, 2005, *First Report of the EU Operational Programme “Competitiveness” 2000–2006*, pp. 13–15.

such as mass tourism and the construction industry. This model has yielded high growth rates but seems to be running out due to intense international competition in both manufacturing and services from countries with low labour cost, which are beginning to penetrate knowledge-intensive activities.

Modern policy tools for developing innovation, such as state procurements, are not used sufficiently to advantage, for reasons related to both the structure of the production system and the inherent weaknesses of the Greek public administration.

The emerging general image is that Greece is lagging behind its EU partners. The country is called upon to exert exceptionally great efforts to cover differences in a great number of fields, to contribute to the achievement of common European objectives and to converge in the common European directions, by identifying and exploiting the prospects and specialisation fields that will grant it competitive advantages, first of all within the common European economic space.

Although specific questions have been raised as to the effectiveness and feasibility of the Lisbon Agenda³⁴, in December 2005 the European Council decided to place even greater emphasis on it by concentrating Cohesion funds in investments that contribute to meeting the Agenda goals. To that end it was decided that 75% of the expenses toward the Objective “*Regional Competitiveness and Employment*” and 60% of the funds toward the Objective “*Cohesion*” ought to be allocated to promote the Lisbon priorities. This decision secures funding for the Lisbon Agenda, which has no financing mechanism of its own, and attempts to closely link cohesion policy to a development and employment policy. Similarly, in this way, the Cohesion programming instruments are placed within the framework of the Integrated Guidelines for Development and Employment, and the National Reform Programmes.

1.2.10. *Competitiveness and the Regulatory Framework*

All of Greece’s macro-economic characteristics have improved: a growth rate significantly higher than the EU-12 average, faster cohesion rate of per capita income, the GDP share

³⁴ For example: as to whether that constitutes a strategy or a benchmarking exercise, whether it is founded on extensive analysis of the problems of the European economy, whether its objectives arise as self-evident virtues, whether it is consistent with a specific theoretical model (as e.g. trade or growth theory), whether it offers a policy mix suitable for every EU member state. See related investigation in W. Kohler, *The “Lisbon Goal” of the EU: Rhetoric or Substance*, Eberhard Karls University Tübingen, Journal of Industry, Competition and Trade, 2006.

Considering the index values achieved by each country, progress in Information Society seems to be a determining factor in Finland, Sweden and the Netherlands, but less so in the UK and France; progress in innovation is consistent with the overall high ranking of Finland, Sweden and Germany, but not of Denmark, the UK and the Netherlands; while market deregulation seems to have worked in favour of Finland, Denmark and the UK, deregulation delays don’t seem to have hindered Sweden, Germany, the Netherlands, etc.

All guidelines applied in all EU member States would obviously raise the competitiveness of the European economy against the USA and other emerging competitors, but their effects will not necessarily be positive within each country’s economy. When a country’s economic space becomes part of a larger space by means of common customs, monetary, fiscal, credit and exchange policies, in effect it turns into a “regional” economic space, so that its initial endowment in know-how and capital becomes decisive, predisposing an accumulation of achievements and resources in the stronger poles, compelling the other countries to extraordinary efforts to keep up. The significance of the initial endowment is highlighted by the European Commission, as for example in EC, DG XVI, 1996, First Cohesion Report, Ch. 6.1.

from investments steadily rising, better labour productivity, the information science and communications share rising faster than the EU average. To increase demand for Greek products and services, and thereby enhance economic development, it is important to maintain a growing GDP in areas with which Greece maintains close economic relations such as the Eurozone, the USA, and the countries of central and eastern Europe. The new institutional framework will play a decisive role in maintaining a steady macroeconomic climate and in releasing entrepreneurial vigour.

An important institutional step undertaken during the preceding period was the voting (and prompt EU approval) of the new Development Law, which exhausts the limits provided by the EU concerning state aid. The policy horizontal component is covered in the Greek National Reform Programme 2005-2008, whose central objectives include ³⁵ :

- ✓ restoring fiscal balance and assuring long term viability of public finance, placing priority in bringing the budget deficit below the benchmark value by the end of 2006,
- ✓ increasing productivity by addressing structural problems in (products, capital and labour) market operation, investing in human resources and promoting the Knowledge Society,
- ✓ improving the business climate, fortifying competitiveness, opening markets, and increasing extroversion,
- ✓ increasing employment, reducing unemployment, more effective operation of the educational, occupational training and re-training systems.

The list of important initiatives is long: corporate tax rates were gradually reduced, and the tax system simplified; new laws were voted, such as the law on Public-Private Partnerships; a new legal framework for licensing businesses in manufacturing, commerce and services; Chamber Legislation for “one-stop-shop” incorporation and licensing of business; the General Registry of Commerce; new law procedures for the creation of S.A. companies and the establishment of offshore companies; bankruptcy law reform; the legal framework for the “European Company”; drawing a National Regional Plan, and plans for Renewable Energy Sources, Tourism and Manufacturing, the Coastal and Mountain areas of Greece; creating a network of business portals, and entrepreneurship courses in the curricula of universities and higher technological institutes; the Private Insurance Supervisory Authority; the law for retail trade; creation of the National Committee for e-commerce; reforming State Procurement management; drawing a National System for Electronic Public Procurements; fortifying the role of the Regulatory Authority for Energy; the new Electric Power System and Transaction Management Code; the legal framework for faster deregulation of the natural gas market; the law on Electronic Communication; the Law for the creation of “Freight Villages”; the accelerated privatisation (selling of OPAP [Official Betting Organization] and OTE [Telephone Utility] shares, preparation for the listing of the Postal Savings Bank and the Athens International Airport in the Athens Stock Exchange, valorisation of State participation in Agricultural Bank and Commercial Bank, etc.); reorganising the Hellenic Foreign Trade Board (OPE); fortifying the Hellenic Centre for Investments (ELKE); activating the National Council for Exports, and the Export Credit Insurance Organisation (ECIO).

In the labour market in particular, the principal endeavour is to strengthen the adaptability of the country’s enterprises and workforce to the new conditions, especially in terms of

³⁵ ΥΠΟΙΟ, *National Reform Programme for Development and Employment 2005-2008*.

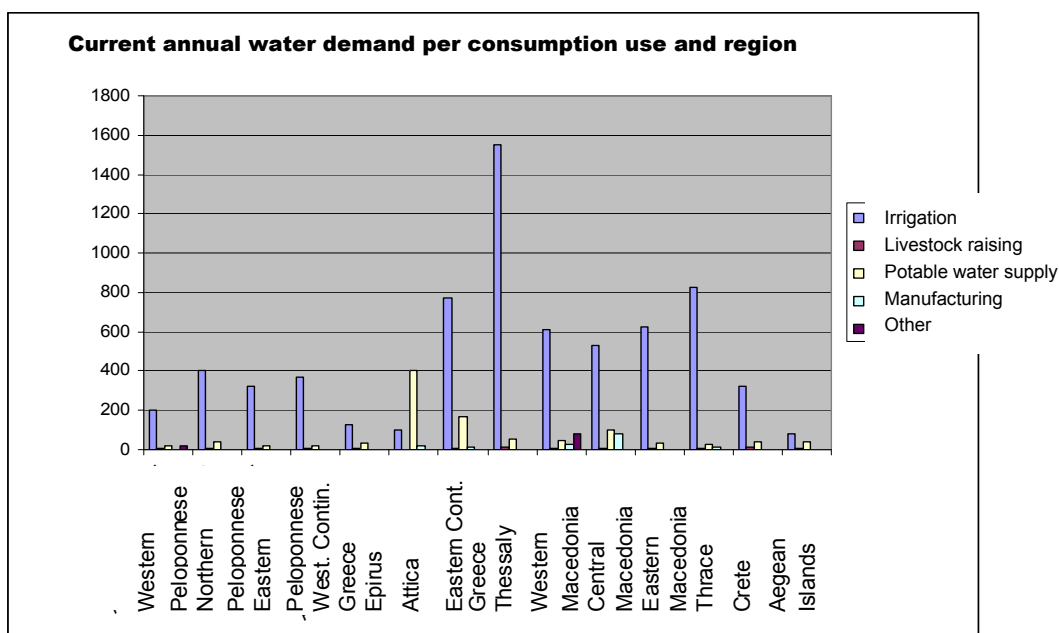
women's participation, the promotion of part-time work and flexible forms of employment, the institutional provision of public employment for socially vulnerable groups; new laws for lifelong learning—regulating working time—fortifying geographic and occupational mobility—consecutive insurance; Second Opportunity Schools and Adult Education Centres; promoting centres and offices for vocational counselling and orientation.

1.2.11. Competitiveness and the Environment

To safeguard the stability and viability of the economic and business environment, the Göteborg priorities incorporate the dimension of the natural environment within competitiveness. In that context, the strengthening of the competitiveness of the Greek economy ought to take into account the availability of exhaustible natural resources. At the same time, the development of entrepreneurial activity ought to be combined with the upgrading of available natural resources and the exploitation of technologies related to the protection of the environment.

The quality of water resources of Greece is considered satisfactory. The problems that do exist are caused mostly by irrational use of irrigation water in agriculture, which in coastal areas allows saltwater to penetrate the aquifers, and also by the irrational use of pesticides and fertilizers which pollute respectively surface water and aquifers. Antiquated water distribution networks allow great quantities of water to leak out, while the seasonal pressure in tourist areas, especially in waterless island regions, produce problems in many locations.

The Table that follows indicates current annual demand for water, and reveals that irrigation is the principal reason for the consumption of water, with highest water consumption values occurring in the agricultural Region of Thessaly. In that framework, the effects of this Operational Programme on the quality of this particular natural resource are not considered significant.



Source: Special Management Authority of the Operational Programme “Competitiveness” (OPCE) (2006), Operational Programme Competitiveness and the Environment: Strategic Study of Environmental Impact, and data processed by authors.

Land resources are also under pressure from agriculture and from the use of pesticides and fertilizers, from animal husbandry, the expansive urban development model, and building construction outside city plans. Those pressures lead to the appearance of desertification effects, the diminution of available land resources, and deterioration of landscape. A Greek Action Plan has been elaborated to address desertification. At the same time several regional plans are nearing completion, including the National Regional Master Plan, and Special Regional Master Plans for manufacturing, tourism and RES.

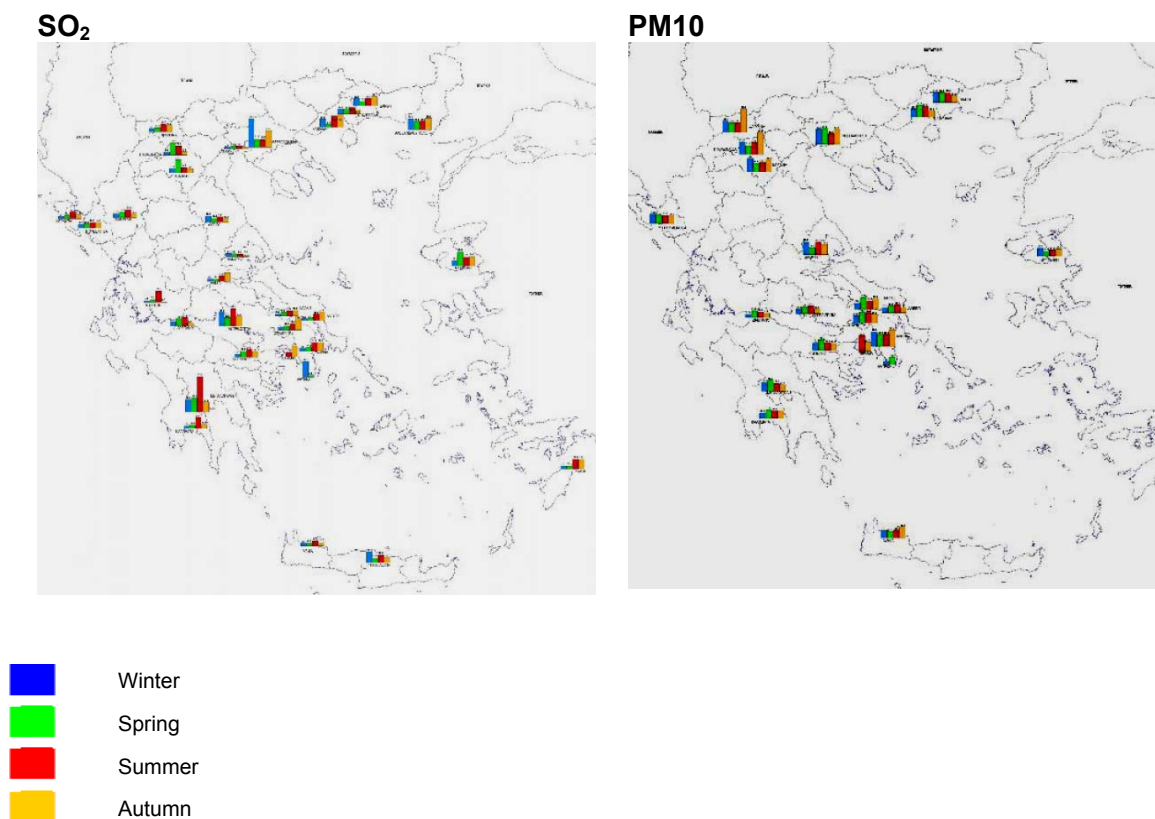
Concerning the issue of solid waste, it is noted that its overall volume is increasing while recycling and re-utilization percentages remain low. However, Greece has already formulated a National Plan for Integrated and Alternative Management of Solid Waste, based among other things on European policy guidelines. Greece has also issued approving decisions for the Regional Plans for Solid Waste Management for six NUTS II regions, while planning for the other regions is about to be completed. In that framework, solid waste recycling and re-utilisation are potentially a sector in which to develop entrepreneurial initiatives and introduce innovations.

Greece has a great variety of ecosystems, and the fourth highest percentage of protected areas among all EU–25 member States. The remarkable natural environment combined with the history, cultural heritage and architectural heritage, offer significant advantages for the development of special forms of tourism (environmental, mountain climbing, thematic, etc.) and for the differentiation of the country’s tourist product, which is founded mostly on mass tourism and the “sun–sea” model. It is estimated that the development of special forms of tourism will contribute to the protection of the natural and cultural environment and foster environmental awareness among the local population.

Air quality is affected mostly by industry and urban pollution. Industrial air pollution occurs in areas where power generation plants are in operation, and also in areas with intense manufacturing activity due either to the existence of large units or to significant industrial concentrations. The latter are usually in the vicinity of the areas of development of the greatest urban concentrations, where the majority of the Greek population live. Despite the

measures already taken for the reduction of air pollution, which have already led to a reduction of traditional pollutants (SO₂, Pb, CO) to values below the lower limits of EU quality control in urban centres, Greece is second–before–last among the countries for which comparable information is available. At the same time change is observed in the composition of pollutants, and as a result in cities like Athens the principal air pollution problem is particulate matter in the air (PM₁₀) and ozone (O₃). Those particular pollutants are related to a great degree with natural causes (increased solar radiation, dust particles in the air masses transported by wind from Africa, etc.), although the contribution of urban pollutants is also significant (traffic, heating, manufacturing), making the adoption of additional measures imperative.

SEASONAL SO₂ and PM₁₀ CONCENTRATIONS IN THE URBAN CENTRES OF GREECE PER SEASON



Source: Greek ministry for the Environment, Planning and Public Works (2007), Strategic Study of Environmental Impact under the Special Regional Master Plan for Sustainable Development and Renewable Energy Sources.

As far as climate change is concerned, Greece has undertaken the commitment to curb during the period 2008–2012 the increase of greenhouse gases emissions by 25% against the respective benchmark year emissions level. The Greenhouse Gases Emissions Scenario (included in the National Allocation Plan for Greenhouse Gases Emissions Rights) indicates that Greece ought to expect a 39.2% increase of greenhouse gases emissions by year 2010. According to the scenario “Measures” the increase of greenhouse gases emissions in Greece could be limited to 24.5%. The achievement of that goal presupposes the combined implementation and coordination of policies for limiting the emissions of greenhouse gases. Within that framework are included the actions provided in the National Allocation Plan for Greenhouse Gases Emissions Rights (penetration of natural gas in all sectors of final demand and in electrical power generation, promotion of RES, energy savings in

manufacturing and in households - tertiary sector, etc.) as well as support for Research to improve the adaptability of the private and public sectors by means of the Programme.

As can be concluded from the above, the Operational Programme “Competitiveness and Entrepreneurship” (EPAE) could significantly contribute to furthering the environmental dimension in entrepreneurship and in competitiveness. To that end, the OP provides on the one hand support for directly environment–friendly interventions, and on the other hand the incorporation of the environmental dimension in all the interventions implemented thereunder, by defining proposal selection criteria that ensure the protection of the environment; by ensuring that the proposed interventions comply with the environmental legislation; by properly informing potential beneficiaries concerning the incorporation of the environmental dimension in their proposals; and by monitoring the impact of the projects on the environment.

1.2.12 Competitiveness, Gender Equality, Equal Opportunities

The issues of gender equality and equal opportunities are linked to the country’s dominant political priorities concerning development, employment and social cohesion. In recent years equality is also viewed at EU level from the perspective of its inherent economic interest, as a factor of production, as it ensues through its connection with demographics and the labour market on the one hand, and social cohesion on the other.

In recent years (1999–2004) women’s employment has increased in Greece by 4.2% (from 40.8 to 45%), against a 2.6% increase in men’s employment. Looking at the evolution of differences in the employment rates of men and women in Greece, we note that it is decreasing over time. Still the difference remains large, with women’s employment much lower than the EU average.

Besides the uneven distribution of unemployment and employment rates, gender discrimination is also observed in women’s greater participation in informal types of work, and also in differences in (i) salary levels, where the gender gap in Greece is much greater than the EU average, (ii) women’s participation in economic activity sectors and particular occupations (professional discrimination), and (iii) professional / career development.

The Operational Programme “Competitiveness” (EPAN) 2000 – 2006 includes significant results in terms of gender equality in two basic directions where discrimination against women is recorded - at domestic and European level - such as starting a business, and access to Research and Technology Activities. More specifically:

- In the framework of Measure 2.8 (“Encouraging Entrepreneurship of Special Population Groups”) women of maximum age 55 received support to start a business. The action attracted significant interest. Four cycles of calls for proposals were tendered; out of the 4,529 proposals submitted by interested parties 2,854 were admitted and granted overall support with a budget of 227 million Euro and 120 million Euro public expenditure. Presently (May 2007), 891 investments have been realised, with a total budget of 58 million Euro and 29 million Euro public expenditure. Another aspect of the measure is an action providing relevant occupational training to women wishing to start a business (640 beneficiaries).
- In the framework of the action concerning business loan guarantees, the 2006 Report–Statement of the Small and Micro-Enterprises Guarantee Fund S.A. indicates that one out of five loan guarantees approved for starting a business or developing an existing one was granted to women entrepreneurs.

- In the framework of the Action “Research Potential Support Programme” (known as PENED) (Measure 8.3) implemented by the General Secretariat for Research and Technology, concerning the implementation of research projects that involve training young researchers and contribute to their doctoral thesis, the 1st call for proposals had included a quota in favour of women candidates (granting a bonus toward their evaluation score). In the framework of the above call, 177 projects are currently implemented, with women doctoral candidates representing more than half of all candidates.
- Women’s participation in research activities in Greece is being studied under the project “PERICTIONE Network of Women Researchers – Scientists in the Mediterranean – the Balkan Peninsula – the Black Sea Countries” (Measure 8.3 of the Operational Programme “Competitiveness” 2000-2006). The project aims to promote gender equality in activities involving research and technology (a field where women’s participation is reduced).

In the framework of the promotion of equal opportunities and the principle of non-discriminatory treatment, Measure 2.8 of the Operational Programme “Competitiveness” 2000 – 2006 provides support for entrepreneurship by special population groups.

- In the framework of the action to help disabled persons start a business, three cycles of calls for proposals were tendered; out of a total of 346 proposals submitted by interested parties 284 business plans were admitted, with an overall support budget amounting to EURm 24. 37 investments under the first two cycles have been completed, with a total budget of 2.6 million Euro and 1.3 million Euro public expenditure (May 2007).
- Furthermore, in 2007, calls for proposals were tendered to support entrepreneurship among the Roma, as well as among parents with three or more children. In the framework of the call for proposals to support entrepreneurship among the Roma, 1138 proposals were submitted with a total budget of 114 million Euro. In the framework of the call for proposals to support entrepreneurship among parents with three or more children, 1520 proposals were submitted, with a total budget of 161 million Euro.

Furthermore, during the academic year 2004 – 2005, the students of two school units for Disabled Persons participated in the 2nd cycle of the *Technomathia* Programme under Measure 4.4 of the Operational Programme “Competitiveness” (EPAN). The Programme is addressed to groups of students (with a teacher in charge) and aims at the comprehension by the students of the evolution of technology and of its relationship with enterprises, ways of production, the economy, society, competitiveness and development.

Additionally, by means of Axis 8 of the Operational Programme “Competitiveness” (*Human Resources*) -funded by the European Social Fund- on the basis of existing commitments, it is estimated that by the end of 2008 approximately 30 million Euro (public expenditure) will be disbursed in actions for occupational training of approximately 20,000 women in the sectors of Tourism, Manufacturing, and Research & Technology.

1.2.13. *Competitiveness and Consumer Protection*

Consumer protection policies are inseparably linked with harmonious market operation and the development of sound conditions of competition. Along with product safety, they constitute a strong motive for the improvement of the competitiveness of the Greek economy. For that reason it is a lasting endeavour of the country to achieve the interconnected

objectives of sound market operation and effective protection of consumers, by means of constant buttressing of the legislative framework, market monitoring, implementing suppressive measures such as limiting the circulation of goods (defective or unsafe products), administrative penalties to suppliers where necessary, informing consumers and managing consumer complaints, and supporting all consumer protection measures in general.

A basic principle of consumer protection policies is the General Product Safety (G.P.S. Law 2251/94 and JMD Z3/2810/2004) which stipulates a general safety injunction and is implemented as complementary legislation for the safety of products that are covered by vertical (special) legislations. This general injunction and the manufacturer's statement of compliance together with the "prior approval" system of pre-market control by the manufacturer and / or the Certifying Authority does not guarantee that the products are safe and cannot substitute market surveillance.

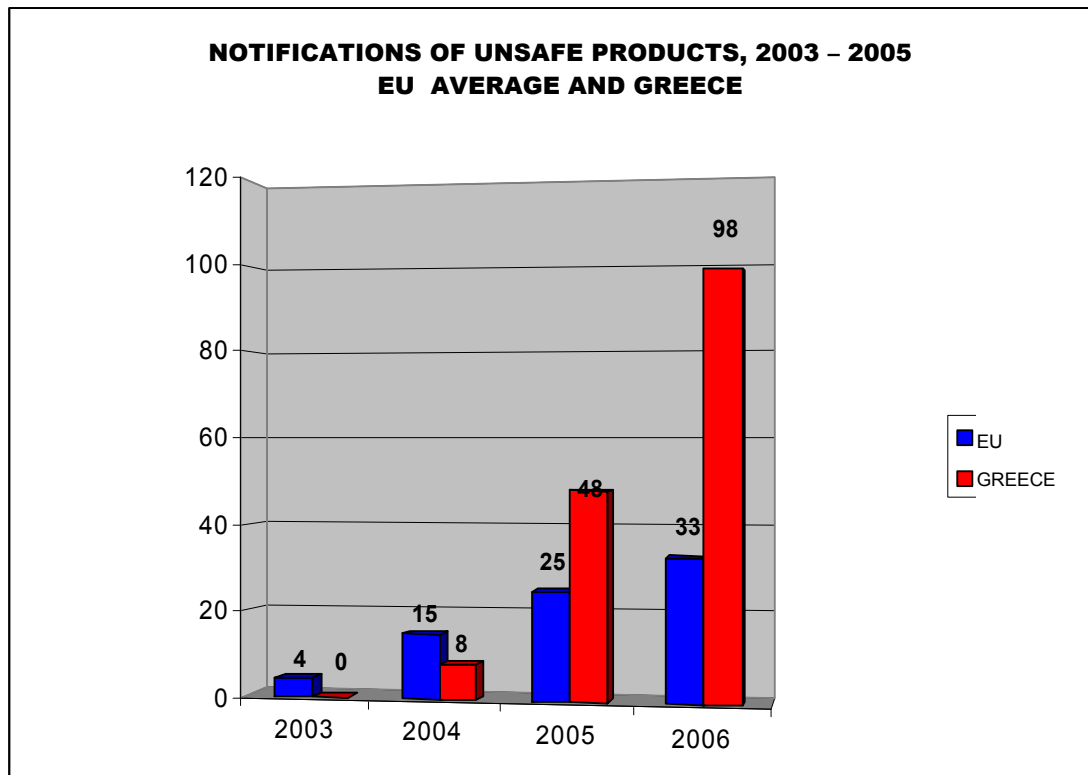
Aiming to ensure a higher level of protection of consumer health and safety the European Commission proceeded to revise the General Product Safety Directive by adopting a new Directive (2001/95/EC). At the same time, the EC adopted measures to improve the effectiveness of market surveillance and to foster administrative collaboration between the competent authorities of EU member states, such as:

- Issuing Guidelines concerning the relationship of the new General Product Safety Directive on the New Approach Guidelines. The first guidelines were issued in November 2003 and subsequently that on 20 November 2005.
- Establishing a European Network for Product Safety, a European forum for the exchange of information and best practices concerning product safety among the competent authorities of the EU member States [the European Network was established on 15-1-2001 with the publication of Directive 2001/95/EU (article 10)].
- Organizing seminars for the training of inspectors on matters concerning the application of legislation, defective products risk assessment, and adoption of preventive limitation measures. Seminars on the Rapid Information Exchange System (RAPEX) started in 2003, were repeated in 2004 and then again 2006, including special seminars for the authorities of Greece and Cyprus. Risk assessment seminars started on 10 January 2006.
- Funding joint EU market surveillance programmes concerning the application of legislation on General Product Safety, as well as New Approach legislations.

The improvement and expansion of the RAPEX system – (the Rapid Alert System for Non-Food Products) – in Directive 2001/95/EC (15 January 2001 Official Journal L11/pp.4-16 – between EU member States, in the case of hazardous products.

For these reasons it was deemed necessary to implement better organisation and better coordination of the actions of competent authorities at national level so as to improve the effectiveness of market surveillance activities. To that end, decision Z3/ 1594/19-5-2005 of the Minister of Development established a Coordination Committee (formed by the Directors of all the Services that are competent for the surveillance of the market in the sector of product safety) that operates at the General Secretariat for Consumers, with a view to facilitating cooperation, exchange of opinions, expertise, best practices as well as the evaluation of existing market surveillance programmes and the planning of joint control activities.

As a result of the improved cooperation and information exchange, recently developed among the Greek authorities competent for market surveillance, controls became more effective and the country's performance concerning the notifications of unsafe products via the European Rapid Information Exchange System was improved, as recorded in the diagram below that corresponds to the statistical data of 2003, 2004, 2005 and 2006.

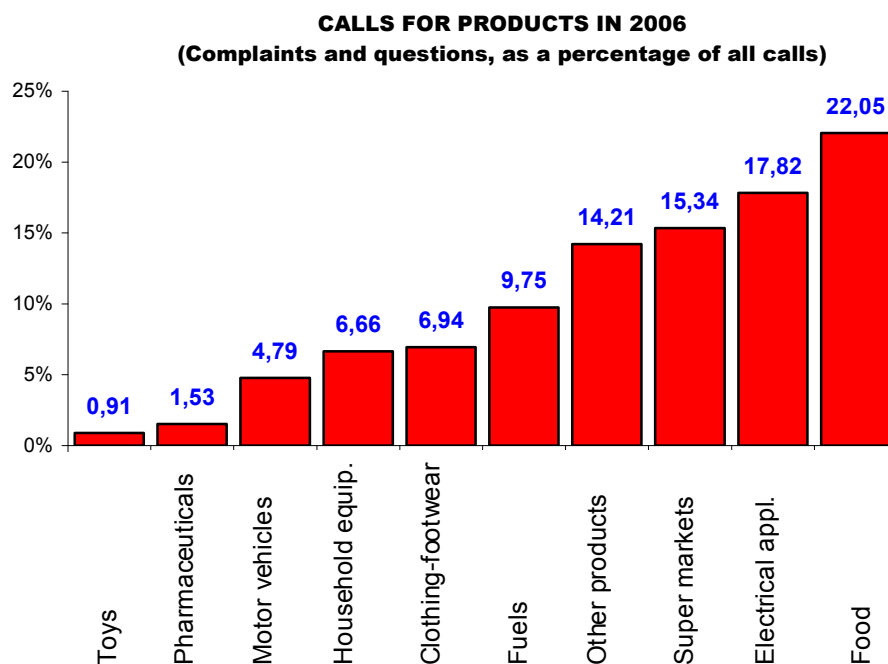
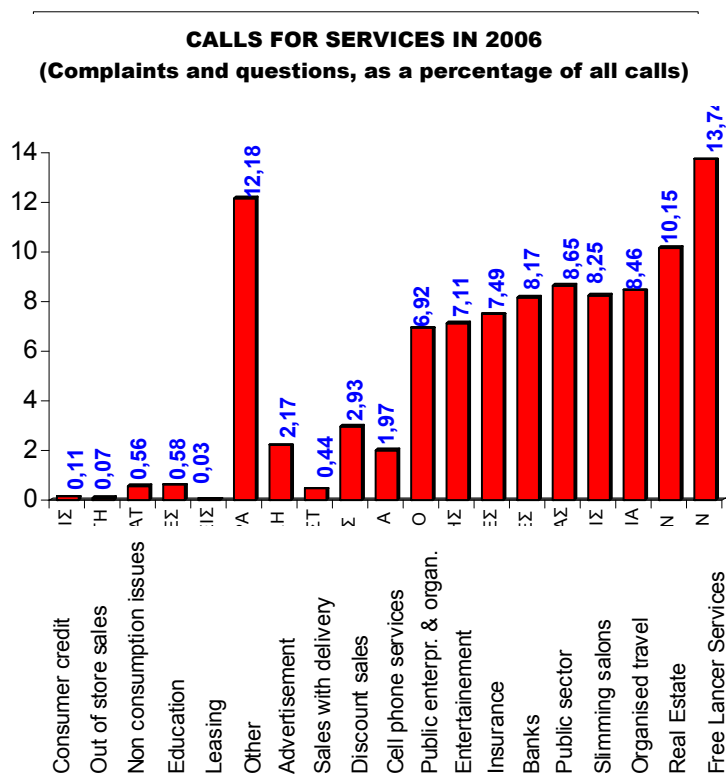


Source: EUROPEAN COMMISSION - Health & Consumer Protection Directorate - General Directorate B - Consumer Affairs, B3 - Product and service safety, Rapex team - Annual reports, and data processed by the authors

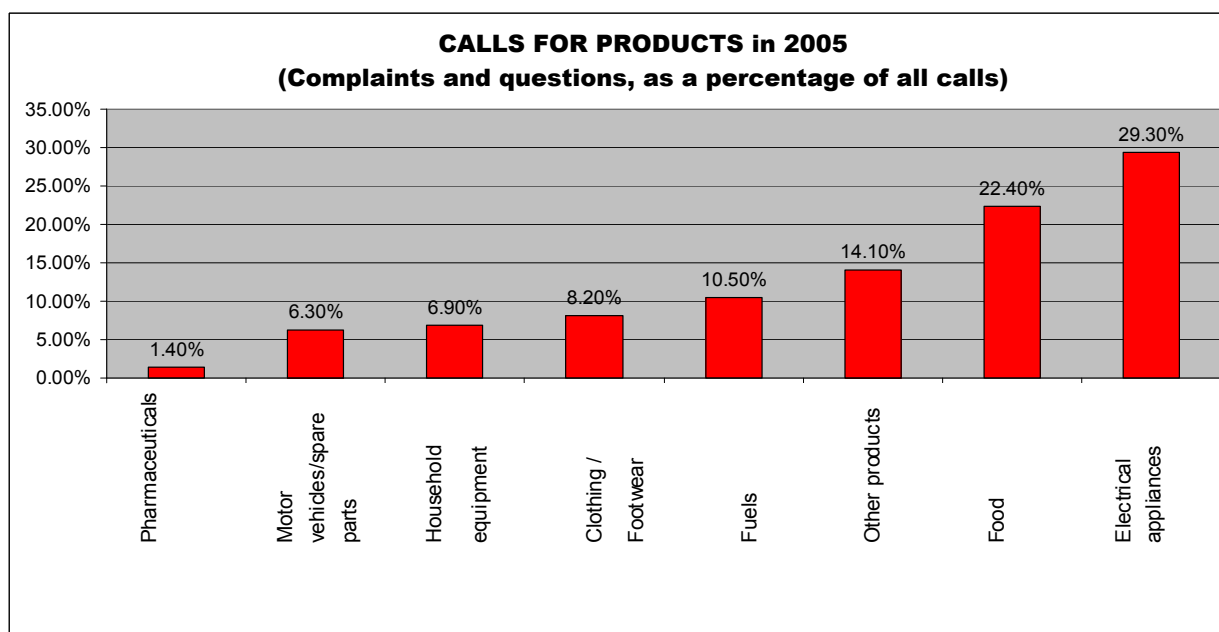
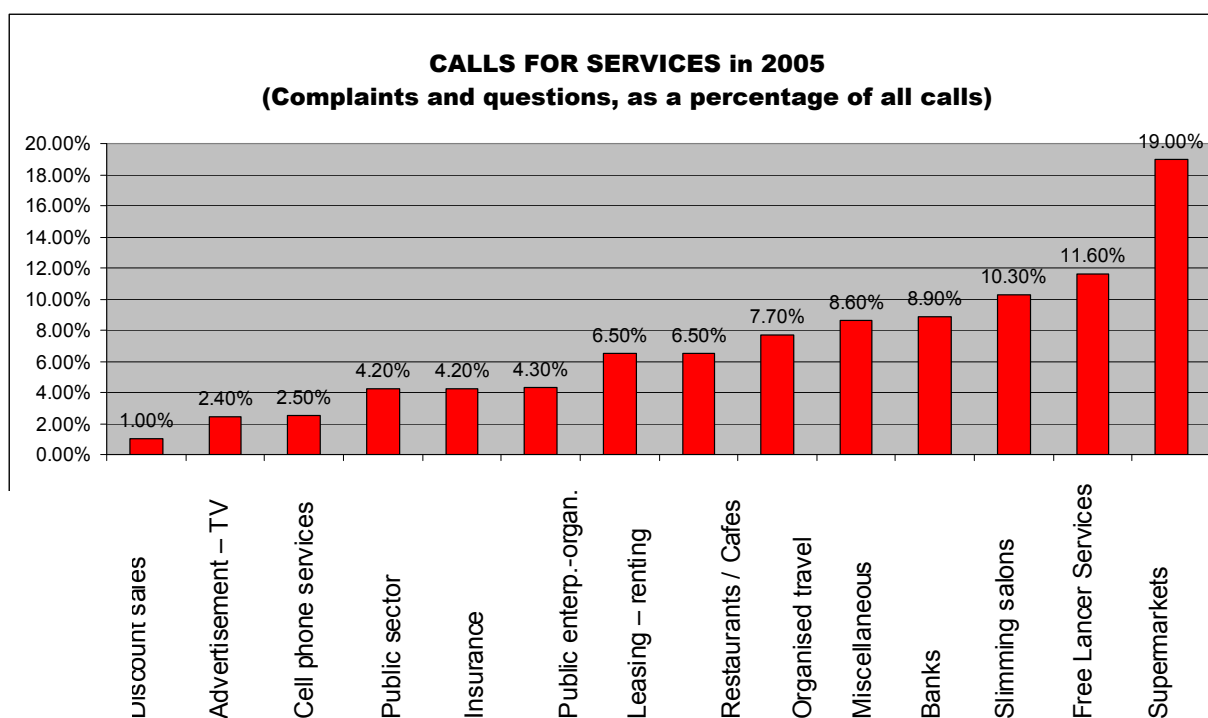
A telephone hotline (1520) operating at the General Secretariat for the Consumer of the Ministry of Development receives complaints concerning defective products and services. The complaints are then processed by the Directorate for Consumer Protection, which forwards them to the competent authorities. Indicatively it can be reported that:

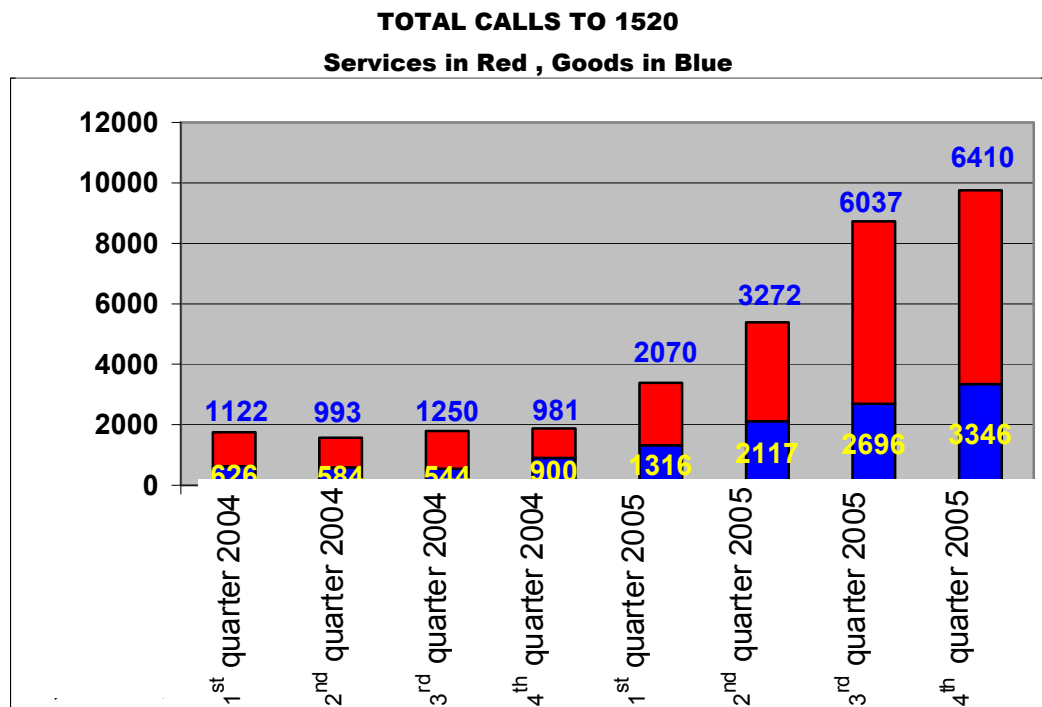
- The total number of complaints and questions (received by telephone or in writing) from consumers who contacted the Directorate for Consumer Protection during 2006 was 38,272, of which 24,534 were complaints and 13,738 were questions. The number of phone calls increased by 40% from 2005 to 2006.
- The total number of complaints and questions (received in writing or by telephone to hotline 1520) from consumers who contacted the General Secretariat for the Consumer during 2005 was 27,264, out of which 16,322 complaints and 10,932 questions. The number of phone calls to hotline 1520 increased 290% from 2004 to 2005. The increase in phone calls concerning services was 309%, while the increase in phone calls concerning products was 257%

During the entire period 2004 – 2006 in which the hotline (1520) has been in operation, the majority of phone calls concerned electrical appliances and food (in the products category), and the service professions, real estate rentals, slimming institutes and supermarkets (which shifted category).



SOURCE: General Secretariat for the Consumer, calls to hotline 1520 during 2006





Source: General Secretariat for the Consumer, calls to hotline 1520 during 2005 and 2004

Usually the calls about services are questions or complaints that concern pricing. Calls about financial services usually revolve around early settlement penalties. Calls about products often concern the absence of a written guarantee, and about food they concern product deterioration, or sale past the expiration date.

In recent years, with the increase of imports of products from non – EU countries in the European market, it is ascertained upon inspection, with increasing frequency, that products bearing quality labels don't fulfil all safety requirements and / or that in certain products the use of labels is misleading, as they are not provided for by the legislation in force. The strengthening of the Internal Market cannot be founded exclusively on prior approval procedures but requires methodical and effective inspection. With the globalisation of trade and the percentage of defective products exceeding 50% (imports from non – EU countries) this need becomes more imperative.

That substantial qualitative change ought to be addressed in Greece by strengthening the resources (economic and human) that are allocated in the direction of Consumer protection. The operation of the Consumer protection system in a permanent, predictable, honest, economical and scientifically organised manner, supported by testing laboratories of the public sector or, should these be absent or inadequate, by specially certified and approved laboratories of the private sector or laboratories outside Greece, is considered an action of paramount need.

1.2.14. Measurement and Factors of Competitiveness

The annual Reports on Competitiveness, elaborated within the framework of the National Council for Competitiveness and Development, measure the degree to which specific indicators of the “national measuring system” have been achieved in terms of significant policy areas:

- ✓ factors and requirements of competitiveness
- ✓ horizontal policies that influence competitiveness
- ✓ interim results of competitiveness,

in order to draw conclusions leading to the final results. The assessment³⁶ based on the 2005 Competitiveness Report is presented succinctly as follows:

COMPETITIVENESS FACTOR GROUP REQUIREMENTS	COMPARATIVE EVALUATION OF GREEK COMPETITIVENESS			Remarks
	Level	Trend	Evaluation period ending	
SOCIAL COHESION	MEDIUM	STABLE	2004	<ul style="list-style-type: none"> Indicators at generally low levels. Need to focus action on redistribution of revenues and smooth incorporation of foreigners in domestic society. Relatively low level of social spending, and low yield of spending on health.
SOCIAL CAPITAL	MEDIUM	STABLE	2004	<ul style="list-style-type: none"> Average confidence levels in the institutions and high public interest in current events and politics.
ENTREPRENEURIAL CULTURE	HIGH	STABLE	2004	<ul style="list-style-type: none"> Traditionally high predisposition for enterprise despite problems. Negative role of the Mass Media.
ENERGY & NATURAL ENVIRONMENT	MEDIUM	IMPROVED	2003 (2004)	<ul style="list-style-type: none"> Large overall surface of protected areas. Consumer model oriented to natural products. High but declining intensity of energy consumption. Promotion of policy for relieving dependence on petroleum.
INFRASTRUCTURES	MEDIUM	IMPROVED	2004 (2005)	<ul style="list-style-type: none"> Improvement of basic infrastructures. Low quality distribution infrastructures. Low investments in information and communication technology. High cost of Internet access.

³⁶ Ministry of Development, National Council for Competitiveness and Development, 2005 Report on Competitiveness, pp. 25-28.

COMPETITIVENESS FACTOR GROUP “HORIZONTAL POLICIES–INPUTS”	COMPARATIVE EVALUATION OF GREEK COMPETITIVENESS			Remarks
	Level	Trend	Evaluation period ending	
ECONOMIC BUSINESS ENVIRONMENT	LOW	IMPROVED	2004 (2005)	<ul style="list-style-type: none"> • Business taxation remains relatively high. Start gradual reduction. • Particularly problematic areas, with serious negative effects, are the public debt, the size and efficiency of the public sector, the lack of transparency, and high inflation.
LABOUR MARKET	LOW	IMPROVED	2004 (2005)	<ul style="list-style-type: none"> • Total unemployment shows tendencies to decline. • Unemployment of young persons remains high. • Employment policy budgets are low.
EDUCATION – TRAINING – SKILLS	LOW	STABLE	2002–2003	<ul style="list-style-type: none"> • Spending on education insufficient. • Extensive learning of foreign languages. • Good student / teacher ratio. • Problems in lifelong learning and vocational training of unemployed persons. • Insufficient matching of education and the labour market.
R&D	LOW	STABLE	2004	<ul style="list-style-type: none"> • Insufficient budgets. • Low expenditures by enterprises. • Low research productivity.
ENTREPRENEURSHIP	HIGH	IMPROVED	2003 – 2004 (2005)	<ul style="list-style-type: none"> • High “last resort” entrepreneurship with rising trend of “opportunistic entrepreneurship”. • Low entrepreneurship of women. • Difficult to promote entrepreneurship in the Media. • Heavy bureaucracy and cost in starting new business.
ENTREPRENEURIAL INNOVATION	LOW	STABLE	2003 – 2004	
PRICES – COST	MEDIUM	WORSE	2004 (2005)	<ul style="list-style-type: none"> • Low hourly wages compared with the EU • 1995 – 2005: comparative unit cost of labour worsened due to foreign exchange policy. • 2003 – 2005: index worsened due to higher wages. • High cost of broadband lines. • Low cost of power and fuels.

COMPETITIVENESS FACTOR GROUPS “INTERIM RESULTS”	COMPARATIVE EVALUATION OF GREEK COMPETITIVENESS			Remarks
	Level	Trend	Evaluation period ending	
SECTORAL COMPOSITION OF PRODUCT – EMPLOYMENT	MEDIUM	STABLE	2004	<ul style="list-style-type: none"> • Trends prevailing in many other countries also appear in Greece: the primary sector shrinks, and services expand. Of special concern is the shrinking share of manufacturing. • Potential comparative advantages not utilised: special agricultural products, special manufacturing divisions.
PRODUCTIVITY	LOW	IMPROVED	2004	<ul style="list-style-type: none"> • Mostly due to low productivity of factors other than labour. • Labour productivity ranges in medium levels.
EXPORTS	LOW	IMPROVED	2004 (2005)	<ul style="list-style-type: none"> • Exports improved in 2005 after a period of stagnation and share losses in the international markets. • Good performance of certain technology – intensive product categories. • Satisfactory shares in exported services.
FOREIGN DIRECT INVESTMENT (FDI)	LOW	IMPROVED	2004	<ul style="list-style-type: none"> • The attractiveness of the Greek economy to foreign investors has been eroded cumulatively. Recovery started in 2004 and in 2005 there is interest for new investments. • Serious shortcomings in the FDI attraction policies of Greece.

1.3. SWOT ANALYSIS

The analysis of Threats - Opportunities – Strengths – Weaknesses, which was carried out during the initial design of the Operational Programme, includes findings, - especially as regards threats and weaknesses – many of which are still valid today. However, new threats and weaknesses have been added, which were either caused by or acquired a greater importance due to the economic crisis, the effort to improve budgetary data and the lack of liquidity of the financial system.

At the same time, due to the aforementioned conditions, several opportunities and strengths have changed, at least as regards their time-frame. Many of the latter can remain only as long-term opportunities/strengths, since their achievement depends on the direct tackling of the repercussions of the crisis, which is a prerequisite for achievement of any long-term objectives.

Especially in the Energy Sector, the quantity and quality features of the demand have changed substantially, due mainly to the impact of the deep economic crisis, but also the institutional developments, the most important of which is the application of the Third Energy Package in regulating the electricity and natural gas markets, as stipulated by L. 4001/2011 (deregulation of the electricity market pursuant to the Directive 2009/72/EU, deregulation of the natural gas market, pursuant to the Directive 2009/73/EU and consumer protection), as well as the differentiation of the energy supplies of the country, where important developments are happening as regards natural gas (new pipelines, LNG). In the new

modified SWOT analysis, beyond the various / sectoral Threats – Opportunities – Strengths – Weaknesses, it is necessary to point out the following main – crucial features of the Greek economy: ,:

- Main threat:** The constant recession during the last five years, and its overall depth, as well as its impact on employment and investments, combined with the banking system crisis (liquidity crisis) threaten or delay the success of the programme to rectify external and internal imbalances.
- Main weakness** The difficulty to achieve the basic objectives of the Programme, i.e. boosting entrepreneurship and competitiveness through targeted actions of state aid, as well as through the creation of energy and research infrastructure, due to the serious recession and theof economic activity..
- Main opportunity:** Improvement of the competitiveness and extroversion of the enterprises and the production system of the country, placing the emphasis on innovation. This opportunity, which constitutes a central development objective of the Programme, contributes to the success of the Economic Adjustment Programme, as well as the promotion of the necessary structural changes.
- Main strength:** Achieving macroeconomic stability and economic balances will allow to improve competitiveness, attract investments, return to positive growth rates and implement reforms.

The modified SWOT analysis of the Operational Programme “Competitiveness & Entrepreneurship 2007 – 2013” is presented below.

OPERATIONAL PROGRAMME COMPETITIVENESS & ENTREPRENEURSHIP 2007-2013: SWOT ANALYSIS

THREATS	OPPORTUNITIES	STRENGTHS	WEAKNESSES
1. Stagnation/recession in the most important destination countries of Greek exports.	1. Commitment to achieve the Medium Term Programme, to develop a mix of new policies and promote institutional reforms		1. Extended recession of the Greek economy, unstable macroeconomic environment, stabilization of divestment..
2. EU enlargement with accession of new member States with low labour cost, high productivity and extroversion	2. Develop Greece as a link between the EU and the Balkan, Black Sea and Mediterranean countries, in new role as natural node for trade.	1. Recent progress trend in exports expected to further improve due to the expected improvement of competitiveness and cost reduction..	2. Low share of product and service exports as % of the GDP, low extroversion
3. Capital outflow to other countries and related deflation of manufacturing – relocation of traditional Greek sections to low labour cost countries.		2. Higher labour productivity and reduction of labour cost per product	3. Low attraction rate of productive FDI
			4. Production cost burdened with extraneous factors (infrastructure quality, high taxation, impossibility to access bank lending and guarantees.)
			5. Delay in improving the parameters defining Structural Competitiveness.
4. The SMEs and Micro–enterprises prevailing in the Greek business scene are very vulnerable to competition	3. Increasing trend for higher quality products and services internationally, an incentive and promotional factor for business	3. Progress in the completion and modernisation of infrastructures, with strong focus on interventions that benefit entrepreneurship	6. Duality in the entrepreneurial structure. Very small enterprises.
			7. Inadequate business support infrastructures, and duplication – multiplication of competences
5. “Large” Greek enterprises are “absorbed” by multinational market leaders	4. International trend to extend cooperation and networks	4. Modernisation of important enterprises	8. Limited breadth of sectoral specialisation and small share of technology–intensive products / inability to create productive networks
6. “Brain drain” of high level scientists to countries with better working conditions and quicker utilisation of research	5. FP7 and CIP opportunities	5. High level human resources in research, of international calibre and with effective international networking	9. Inability of SMEs to incorporate know-how and develop high value added products

THREATS	OPPORTUNITIES	STRENGTHS	WEAKNESSES
			<p>10. Little utilisation of ICT by many enterprises. Limited R&T spending as share of the GDP. Low involvement of the private sector.</p> <p>11. Over-concentration of RTD in few regions (Attica & Central Macedonia)</p>
	6. Raise awareness of business groups concerning the production and use of RTD	6. Strong presence of Greek researchers abroad	12. Acceleration of the shrinking rate of the country's manufacturing base.
7. Very rapid turnover of technology rapidly rendering obsolete the new infrastructure created to cover R&T gaps	7. Potential for R&T penetration in Balkan, eastern Mediterranean and Black Sea	7. Significant improvement of R&T infrastructures	<p>13. Insufficient modern ICT infrastructure (broadband networks)</p> <p>14. Poor know-how transfer mechanisms, inadequate intermediaries</p>
8. "All-inclusive" structure of tourist demand dominated by multinational tour operators	8. Improvement of the country's badly hurt image as a safe and attractive tourist destination, aiming at an unrelenting increase of demand.	8. Massive contribution of the tourist sector in the GDP and job preservation	15. Summer seaside tourism model still dominant—small incidence of new forms of tourism
		9. Organised showcasing and promotion of the Greek tourist product	16. Small size tourism enterprises and lack of organised tourist business structures. Little networking between enterprises and little interaction with other sectors
		10. Utilisation of the assets of the Tourist Development Agency	17. Short tourist season / Highly seasonality / High concentration
9. Stronger special forms of tourism and infrastructure in competitor countries who had a head start restructuring their tourist product	9. Rising demand for special / thematic forms of tourism	11. Remarkable and/or famous natural, historic and cultural tourist resources	18. Inadequacy of specialised tourist infrastructure
		12. Significant progress in developing infrastructures and institutions for Cultural Heritage and Modern Culture	19. Need to further develop and network tourist infrastructures, institutions, and high quality services
10. Risk of not honouring international commitments in the energy sector and	10. Upgrading the role of Greece as energy hub in southeast Europe , by	13. Satisfactory maturing of important projects with an international luster, with the	20. Very dependent on imports in periods of energy intensity

THREATS	OPPORTUNITIES	STRENGTHS	WEAKNESSES
not implementing projects with significant effects for Greece	means of developing European electricity and natural gas networks.	participation of Greek agencies.	21. High level of competition by alternative projects promoted in neighbouring countries
	11. Active participation in regional energy market initiatives		22. Difficulties and delays in licence granting and implementation of complex electricity and natural gas infrastructure projects
11. Energy supply dependent on relations with principal suppliers (safety of supply)	12. Increasing of potential suppliers from new sources, mainly for natural gas and oil.	14. Significant potential for RES and CHP, and increasing penetration of natural gas	23. Small penetration rate of Renewable Energy Sources in the power system
		15. Substitution of traditional fuels consumption by renewable energy sources, CHP and energy saving	24. High cost of interventions for renewable energy sources and energy saving
		16. Increase of natural gas penetration, whose international supply is adequate and competitive	25. Low level of awareness in household and the tertiary sector for energy options that increase the safety of supply
12. Explosive increase of unemployment, hitting mainly the construction and manufacturing sectors, but expanding gradually to the tertiary sector.	13. Attracting major investments on the basis of the significant economic potential remaining for many technological applications.		26. Problems in ensuring funds for paying for the production of electricity by renewables.
			27.
13. Unstable investment environment for private investments in RES and CHP		18. Improvement of the institutional framework governing new investments and installation rules of the units.	28. Difficulties and slow procedures for the development of grids on the mainland and for the interconnection of the islands.
14. Negative macroeconomic environment acting as a deterrent for attracting foreign investments.		19. Notable workforce reserves.	29. Low link between education with entrepreneurship
			30. Low performance in lifelong learning
15. Unwillingness of the financial sector to grant loans to businesses, but also to participate in the financing of Major Projects.		20. Significant tertiary sector activity	31. Lack of supply chain support infrastructure

1.4. ASSESSMENT OF THE ACHIEVEMENTS OF THE PREVIOUS PROGRAMMING PERIOD

At the onset of the previous programming period, the intervention on the competitiveness of the Greek economy faced an overall activation problem caused by initial delays and planning mishaps, the principal ones being¹ :

- The OP strategy, broken down in sectors and fields rather than having an overall structure: the Operational Programme “Competitiveness” (EPAN) ensued (in terms of procedure) from the “adding” of four draft OPs, so that it did not encompass structured strategy for competitiveness as a whole but rather separate strategies for each sector – field and a cumulative sum of sectoral policies (for manufacturing and services, tourism, energy, natural resources, research and technology).
- A low level of readiness for “innovative” actions and for infrastructure projects of high complexity
- The OP was broken down in many Measures and a great number of Actions, which resulted in the overloading of the administration system with tasks involving calls for tenders, evaluations and project inspections to the detriment of Operational Programme management functions, in the saturation of Final Beneficiaries, and in the multiplication of crucial legal and regulatory procedures (e.g. for the approval of new aid regimes).

As of 2003, the Operational Programme “Competitiveness” (EPAN) started to go beyond the “global” phase and shifted to the phase of “localised problems” pertaining to each Action and Project, problems linked to either the type of intervention or to the characteristics of the Final Beneficiary. The Programme managed to overcome “mobilisation” problems yet the serious initial problems, in spite of the very great effort exerted, weighted on the implementation rates and the degree of accomplishment of its initial objectives.

Of the 63 Programme objectives – indicators (Priority Axis indicators), 37 are very feasible or already accomplished. Priority Axis 2 (Entrepreneurship) has marked a greater frequency of “high” objectives while Priority Axis 4 (Research and Technology) a greater frequency of “feasible” objectives. More specifically², it is expected that the following results and outputs will be achieved under Operational Programme “Competitiveness” (EPAN):

¹ See Ministry of Development, BCS - Remako, 2003, *Interim Evaluation Report of the Operational Programme Competitiveness*, Ch. 4

² See Ministry of Development, BCS - Remako, 2005, *First Statement Report of the Operational Programme Competitiveness, 2000-2006*, Ch. 2, pp. 89 - 119.

TABLE 34: OPERATIONAL PROGRAMME RESULTS AND OUTPUTS 2000-2006

(Ministry of Development, BCS - Remako, 2005, *First Statement Report of the Operational Programme Competitiveness, 2000-2006*, Ch. 2, pp. 89 - 119.

RESULTS	
Number of accreditations granted by the Hellenic Accreditation Council	40
Number of businesses that contacted the Business and Technology Development Centres	15,000
Number of businesses that received support in actions to go international	100
Number of businesses for which the Business and Technology Development Centres intermediated the utilisation of modern financial instruments	150
Increase of installed electrical power from Renewable Energy Sources and Combined Heat and Power Cogeneration (MWe)	650
Increase of installed thermal power from Renewable Energy Sources and Combined Heat and Power Cogeneration (MWth)	350
Annual net power production from Renewable Energy Sources and Combined Heat and Power Cogeneration (Gwhe)	3,500
Annual production of net thermal power from Renewable Energy Sources and Combined Heat and Power Cogeneration (Gwhth)	600
Number of businesses that received support to install Quality Assurance System (Total Quality)	1,300
Number of businesses that received support to develop and install an Environmental Management System	55
Number of businesses that received support to install a Workplace Hygiene and Safety System.	60
Number of businesses that received support to develop systems for Hazard Analysis–Critical Control Points	180
Number of businesses developing electronic commerce applications	80
Number of loans guaranteed by the Small and Micro-Enterprises Guarantee Fund	10,000
Number of new businesses to receive support from the Fund	1,000
New researcher jobs during Measure implementation	1,000
New ship berths in harbours	160
Annual capacity to supply Greece via the Revythoussa Liquid Natural Gas (LNG) facility (million Nm ³)	4,700
RES power penetration in the Greek energy grid (MWe)	550
New connections (meters) to interconnect consumers with the distribution networks in the Natural Gas supply areas (number of connections)	110,000
Increase of annual natural gas sales (million Nm ³) to household consumers and service businesses in the three areas, after the networks are completed	400
Increase of annual natural gas sales in the new cities (million Nm ³)	150
Quantity of petroleum piped to the airport (m ³ per year)	680,000
Listed annual potential of low enthalpy geothermal energy (thousand TOEs)	225
OUTPUTS	
Number of public laboratories receiving support	45
Number of new Investor Reception Centres	52
Number of Business and Technology Development Centres	13
Number of Greek enterprises receiving certified environmental management systems (base value 100)	200
New enterprises certified according to ELOT / ISO 9000, 14000, 1801, 1416 standards	1,800
Number of tourist accommodation beds being modernised	65,000
Number of tourist enterprises receiving support	5,000
Overall number of enterprises receiving support under the Development Law	250
Number of SMEs receiving support under the Development Law (part of the previous number)	150
Business plans (on-going) of existing enterprises receiving support.	75
Special investments (on-going) by new or existing businesses receiving support.	273
Existing enterprises with technical modernisation investment proposals receiving support.	80

RESULTS

Existing enterprises receiving support for environmental measures exclusively.	30
New or existing laboratories that offer quality control services receiving support.	8
New or existing recycling facilities etc. receiving support.	5
Existing enterprises receiving support under Measure 2.7.	2,000
Number of new enterprises started by first-time entrepreneurs	1,600
Number of new enterprises started by women	1,030
Number of new enterprises started by persons with special needs	70
Number of investment plans receiving support for Environmental Management Systems according to the Eco-Management and Audit Scheme (EMAS)	90
Number of existing service enterprises receiving support.	1,500
Number of spin off enterprises	40
Number of laboratories that employ production input to enhance their competitive status in knowledge – intensive services receiving support.	25-30
Technology parks and incubators receiving support.	3-5
Expansion and rationalization of the operations of Intermediations' Offices	20
Enterprises receiving support under the Industrial Research Development Programme and the Industrial Research and Technology Development Programme for New Enterprises	250
Number of collaborations with developed countries outside the EU	100
Number of joint ventures for RTD receiving support.	110
Number of participations of enterprises and research agencies in joint ventures for RTD.	400
Number of investments to strengthen tourist infrastructure receiving support.	20
Number of investments in special infrastructure for tourism.	23
Number of restaurants receiving support.	500
Connection of the Greek grid with new supply sources in Asia (km)	85
Number of independent RES power production facilities to be connected to the grid	70
Length of new low pressure line extensions in Natural Gas provision areas (km)	2,200
Length of new high pressure lines to new industrial consumers (km)	129
Number of new medium and high pressure networks for industrial use in new cities (km)	305
Number of persons to attend initial vocational training.	800
Number of first-time vocational training graduates to complement their skills.	1,200
Number of workers, entrepreneurs and self-employed professionals to receive vocational training.	16,000
Number of SMEs and Micro – enterprises receiving support to upgrade their personnel.	400
Number of SMEs and Micro – enterprises receiving support to utilise the Internet for business.	25,000
Number of new accredited researchers to accede to the Greek research system (no less than 20% female).	1,000
Number of researchers from abroad (Greek or non-Greek) who will be employed for the first time in Greece.	150
Number of participants in tourist vocational training, education and exchange programmes.	12,500
Number of enterprises training their personnel (Programme GoOnline/ Others)	25,000
Overall number of doctoral candidates	1,000
Number of female doctoral candidates (part of the previous number)	350

The Operational Programme “Competitiveness” has also been decisively contributing to achieve the objectives of the CSF that concern the sectors it covers: 30% toward the final objective of the CSF concerning support for the investment plans of enterprises; 35% toward the number of tourist accommodation beds that are being modernised; 82% toward the

number of workers, entrepreneurs and self – employed businesspersons that are undertaking vocational education and training; 49% toward the jobs created during implementation in the Manufacturing and Services sector; 34% toward new jobs created during operation of projects in Tourism; and 31% respectively in Manufacturing & the Services. To conclude, the successful implementation of the Operational Programme “Competitiveness” is expected to lead to the creation of approximately 70,000 jobs (in equivalent man – years), and the running of its projects is expected to lead to the creation of approximately 28,000 new jobs (see Ministry of Development, BCS - Remako, *First Statement Report of the Operational Programme “Competitiveness”, 2000-2006*, Ch. 51, pp. 181 – 182).

The progress accomplished at the institutional level, presented in the preliminary analysis of crucial matters (section 1.2.10), should be factored in the above assessment.

2. DEVELOPMENT STRATEGY FOR THE PERIOD 2007-2013

2.1. DEFINITION OF NEEDS – GENERAL STRATEGY

At the start of the current programming period, and despite the relative progress that had been achieved in improving the competitiveness of the Greek economy, the latter continued to be afflicted by:

- Limited capacity to incorporate new technologies and failure to bring Research, Technological Development and Innovation penetration rates up to the average of the EU-25.
- Low productivity and insufficient external orientation in sectors of the Greek economy, with inability to face international competition.
- Chronic weaknesses in production, with 'historical causes' which have not been tackled in the past with sufficient vigour.
- Limited role in the new economic environment, particularly in respect of developments in the Balkans and the Mediterranean.
- Ineffective mix of policies to coordinate the state's business and economic resources in order to achieve high rates of productivity and highlight the attractiveness of the Greek economy.
- Difficulties in optimizing the combination of development contributions of various sectors of the economy.
- A business environment which has not achieved a high enough level of maturity to attract and offer favourable conditions for foreign investment.
- Limited initiatives to develop the skills of the workforce and integrate it into the knowledge economy.
- Incomplete energy network and limited use of 'green' business strategies.
- High level of dependence on the Structural Funds.

To the weaknesses/needs mentioned above, one has to add the extended recession of the Greek economy, the considerable drop of GDP, investments and gross domestic production value, which have led to a gradual significant decrease of the international competitiveness of the economy and an increase of unemployment.

Consequently:

The central development objective of the Operational programme 'Competitiveness and Entrepreneurship 2007-2013 is to improve the competitiveness and external orientation of Greek businesses and industry , with the emphasis on the dimension of innovation.

By the end of the programme period 2007-2013, in respect of competitiveness-extroversion-entrepreneurship, the Greek economy needs to have met the needs set out below:

1. It needs to have reinforced its competitiveness by boosting its production capacity and upgrading all sectors to generate higher added value; it needs to have adopted significantly more extrovert attitudes, to have expanded its share of global trade in goods and services and to have recovered to a considerable extent its own domestic market.
2. It must have acquired the ability to incorporate those technologies best suited to its needs; it must have a system for promoting innovation and exploitation of human resources able to adapt the innovations generated to local needs, and it must implement, sufficient national research and technological development to reduce its deficit in Research, Technological Development and Innovation compared to the EU-25 average .
3. It must find the right combination of contributions to development by all sectors of the economy, promoting their input to overall competitiveness and assisting them to evolve into significant components in the European economic system.
4. It must meet the challenges arising from expansion of the European economic area and the ongoing deregulation of economic relations, becoming a key focal point and source for the dissemination of development across the Balkan and Mediterranean economic region.
5. It must have developed powerful regional economic systems, capable of operating under their own steam in the new trans-regional framework of international competition.
6. It must find a successful combination, using the mix of elements most appropriate to each situation, of the strategic role of the state, the ongoing expansion of entrepreneurship, the productive mobilization of banking resources and the attraction of external activities featuring high levels of skill and expertise .
7. It must have acquired the capacity to contribute substantially to the achievement of the most important of the shared European objectives, having as a rule the strategy for Europe 2020, adapted appropriately to Greek circumstances, and must be able to exercise with success its own influence on common European policies .

Meeting these needs is an ambitious but vital undertaking. If all areas and sectors of the Greek economy are not upgraded to generate higher added value, then any competitive benefit will be merely a product of circumstance, dependent on changes in the international environment. If we do not cultivate much more extrovert attitudes (especially under present day conditions of extended recession of the Greek economy), the country will remain in the category of a state 'kept' by foreign funding. If we cannot recover our own domestic market we shall not have an adequate base on which to build foreign expansion. If we cannot incorporate the right technologies, we shall continue to see Research and Technological Development divorced from production; our productive fabric will continue to await the necessary upgrading. If innovation cannot be adapted to local needs, it will be confined to its role as a sub-contractor to business and domestic Research and Technological Development will continue to work in a vacuum, continually reliant on public funding. If we cannot promote sufficient research and technological development, the economy will be condemned to

permanent dependence on the international market for innovation and the national Research, Technological Development and Innovation system will have no future and thus no raison d'être.

Promotion of innovation must be the basic horizontal dimension for all the interventions in the Programme, in all the areas it covers. The Greek economy can no longer sustain its business and industry on current levels of use-exploitation-production of innovation. It is essential that we incorporate (and develop) innovation in the country's productive fabric, that we promote a knowledge society, that we upgrade and make full use of the country's human resources, that we exploit and disseminate research and new technology as fully as possible, and that we ensure the technological upgrading of our businesses.

Furthermore, increased extroversion and an improved position for Greece in European and international terms must be achieved mainly through promotion of links with global markets and international, integrated systems for generation of products and services, strengthening of international alliances between agencies and businesses, increased exports of goods and services, the inclusion of the country into the major international (trans-European) energy networks and the creation of an attractive environment for investment and activities which will help upgrade our production system and create competitive advantages, differentiate our tourist product (using natural and cultural resources, with dynamic development of alternative forms of tourism), ensure the quality of new and existing tourist infrastructures and activities, and improve the international image of the country as a destination for tourists.

We should not underestimate the fact that, as in the OP 'Competitiveness' 2000-2006, the Operational Programme will form part of an overall endeavour in the area of competitiveness (there will also be non-co-funded investments by the private and public sector, as well as parallel policies) and that certain key factors in competitiveness (such as the common monetary and financial policies of the Euro-zone) have proved more powerful than any programme intervention. The new programme is therefore required to act as a catalyst in respect of vital challenges; it cannot be expected to correct all weaknesses and solve all problems.

Specifically, the success of the overall endeavour of supporting the entrepreneurship of the Greek economy depends to a great extent on the effective implementation of the Economic Adjustment Programme aiming at facing the structural problems and restoring internal and external imbalances .

Hence there is a need for:

On the general level:

- ✓ reorientation of the centre of gravity of the interventions from the infrastructure sector to actions in support of extroversion, entrepreneurship and innovation, in view of increasing competitiveness,
- ✓ linking and coordination of all interventions, whether national or regional in scale, which must be defined on the basis of a clear analysis of their contribution to the meeting of new challenges: economic recession, impact of EU expansion, increased international and trans-regional competition, new community policies and initiatives,
- ✓ special emphasis, within the competitiveness interventions, on those sectors which have lagged behind in previous periods, support for medium-sized enterprises (which face the basic problem of expansion and the challenge of delocalisation, creation of competitive 'poles of development' in the country's regions, development of 'centres of excellence' in

industry and tourism, recovery of the domestic market by SMEs, aid for special forms of tourism with wider spatial dispersal of tourist movement and encouragement of tourism outside the main tourist seasons.

In respect of the structure of the Programme:

- ✓ development priorities to correspond not to sectors (processing – tourism – energy – research etc.) but to basic problems,
- ✓ "lightening" of priorities, establishing a small number of actions and unifying similar actions and those operating in synergy.
- ✓ Integrated approach, synthesis and flexibility in use of funding tools and mechanisms, rationalisation of means and mechanisms of implementation
- ✓ Emphasis on support for businesses through financial instruments (e.g. guarantees, venture capital, micro-credit, etc.), reorientation of direct aid to collective formations and collaborations

The central needs outlined above, together with the sector-specific needs (see Annex 2 «Special Targets by Sector») make up the framework for definition of the Competitiveness Strategy over the period 2007-2013. The Strategy does not depend entirely on the OP 'Competitiveness and Entrepreneurship' 2007-2013. Its implementation will also be assisted by:

- all the parallel interventions identified in the text of the National Strategic Reference Framework 2007-2013
- the co-funded interventions for competitiveness and entrepreneurship of the five Regional Operational Programmes
- the statutory interventions of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, and the Ministry of Culture and Tourism, which accompany the Programme strategy.
- The interventions of Fiscal Consolidation Programme

In determining the priority axes of the OP account was taken of the recommendations of the ex-ante evaluators, as well as the authors of the Environmental Assessment Strategy.

2.2. PRIORITIZING OF OBJECTIVES AND DEVELOPMENT PRIORITIES

Realizing the vision of development in terms of the competitiveness, extroversion and entrepreneurship of the Greek economy will involve framing a strategy with focused, prioritized and synthetic objectives, with the emphasis on the dimension of innovation and with effective links between all the interventions, both regional and national, designed to promote competitiveness: actions will need to be specifically tailored on the basis of concrete evidence of their contribution to meeting the new challenges. The development strategy of the OP Competitiveness and Entrepreneurship 2007-2013 for the reorientation of the Greek economy to greater productivity, business activity, extrovert attitudes and innovation is defined more narrowly in the following Strategic, General and Specific Targets:

2.2.1. *Strategic objectives*

As we explained in the previous section, the **central development objective of the OP Competitiveness-Entrepreneurship 2007-2013 is to improve competitiveness and extroversion among businesses and the productive system of the country, with the emphasis on the dimension of innovation.** The central development objective can be broken down into three Strategic Objectives, as follows:

1. Accelerating transition to the knowledge economy.

In the spirit of the Lisbon Strategy, and of the related objectives of the National Reform Programme, the Operational Programme will serve as a catalyst in the context of the National Strategic Reference Framework, contributing to the creation of a favourable climate for increased spending on RTD by the public and private sector and to the attainment of the objective that the Gross Domestic Spending on Research and Technological Development should approach 1.5% of GDP by the end of the programme period 2007-2013, with business making up 40% of this spending. To this end a significant contribution will be made by the Regional Operational Programmes, particularly those in the Regions of Attica and Macedonia-Thrace, the Sectoral Programmes Digital Convergence, Human Resources and Education and Lifelong Learning, as well as the use of other means such as the Development Act, the intensified use of tax incentives under article 9 of Law 3296/2004, the 7th EU Framework Programme for RTD activities, for which resources have been stepped up considerably, international cooperation supported by bilateral cooperation agreements and participation in European and international agencies (CERN, EML, EMBO etc) and so on.

2. Development of healthy, sustainable and extrovert entrepreneurship, and assurance of the physical, statutory and organizational conditions in which it can develop.

A basic aim of the OP Competitiveness-Entrepreneurship is to contribute to the increase in private investment, coupled with the prospects provided by the new Investment Law (3908/2011), increasingly outward-looking attitudes and the upgrading of Greece's profile in the European and international context.

3. Making Greece more attractive as a place for developing business activities with respect for the environment and for sustainability.

The OP Competitiveness-Entrepreneurship contributes to meeting the country's environmental objectives and commitments deriving from Directive 2009/28/ EC on

energy and climate change ('20-20-20' Objectives) by the year 2020. At the same time it will – in tandem with other Operational Programmes and the new Development Act – assist in increasing the share of natural gas in domestic energy consumption and the share of RES in gross domestic energy consumption.

The developmental strategy of the Programme focuses on actions of:

- ♦ shifting public aid towards interventions and sectors of higher added value,
- ♦ enhancing the possibility of incorporating new technologies and adapting the innovations produced in the Greek productive system,
- ♦ improving the business environment,
- ♦ improving the country's extroversion through its interconnection with international integrated systems for the production of products and services, the support of international partnerships among agencies and enterprises and the increase of exported goods and services,
- ♦ integrating the energy system of the country and enhancing sustainability,

which mainly consist of long-term, investment-type interventions, but with a parallel orientation and suitable actions for directly addressing crucial needs for supporting entrepreneurship and enhancing the competitiveness of the Greek Economy, for the purpose of addressing the particularly negative impact of the current extensive economic recession, as well as the deep financial crisis.

2.2.2. General objectives

The Strategic Objectives of the OP are more narrowly defined in the form of 4 General Objectives, which respectively correspond in operational terms to the four thematic Priority Axes of the OP, which result from the sectoral synthesis of the object of the Programme:

- a. intervention in the sector of Research and Innovation
- b. intervention in the sector of entrepreneurship
- c. intervention in the sector of support for the business environment
- d. intervention in the sector of energy supply as a condition of achieving better competitiveness.

The General Objectives of the OP are thus defined as follows:

1. Generation and utilization of Innovation, supported by Research and Technological Development.

This objective serves the Central Development Objective, focuses on the 1st Strategic Objective and constitutes the first intervention object of the Programme.

2. Support for Entrepreneurship and Extroversion. This serves the Central Development Objective, focuses on the 2nd Strategic Objective and constitutes the second intervention object of the Programme.

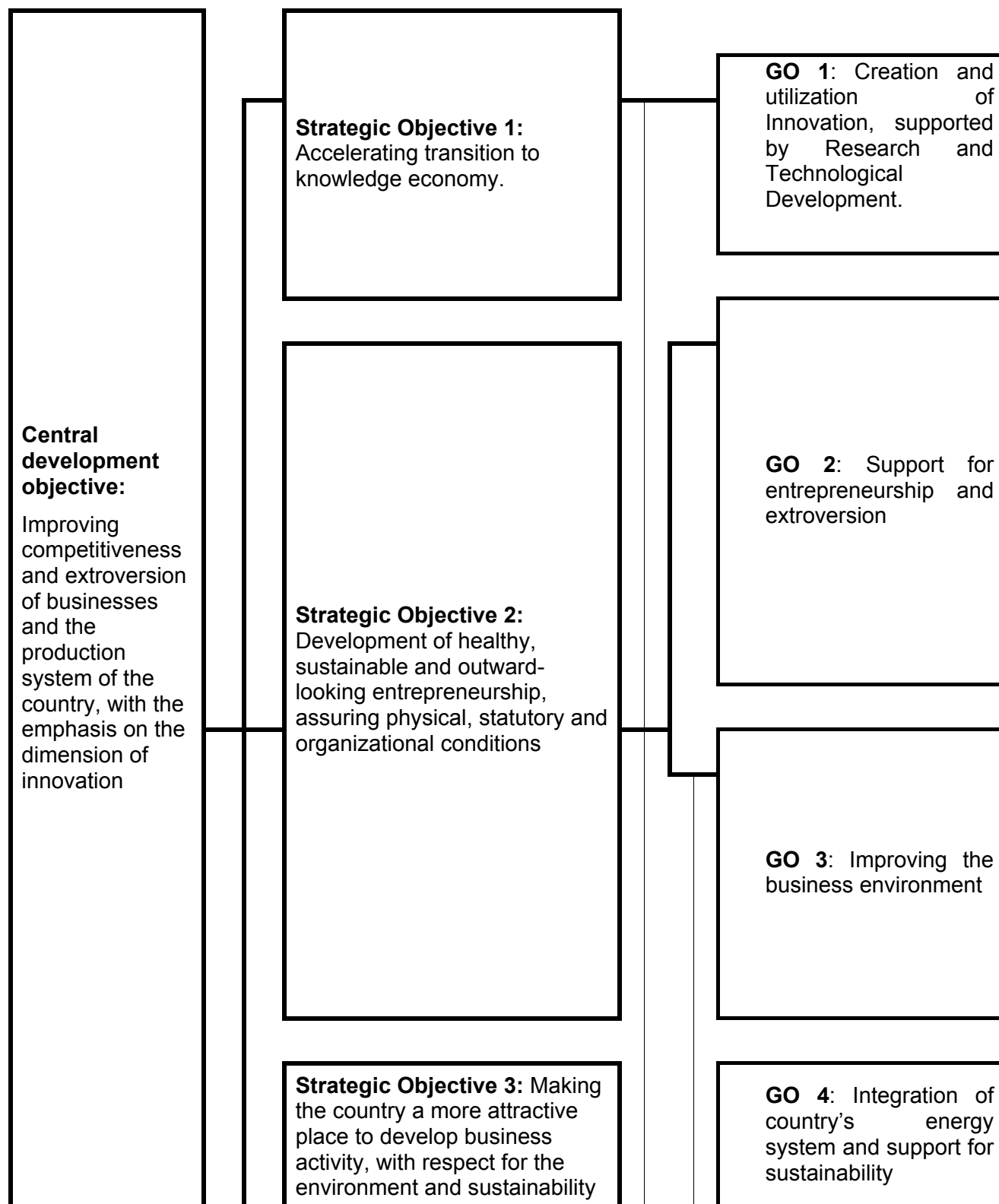
3. Improvement of the Business Environment

This serves the Central Development Objective, focuses on the 2nd Strategic Objective and constitutes the third intervention object of the Programme.

4. Integration of country's Energy System and strengthening sustainability

This serves the Central Development Objective, focuses on the 3rd Strategic Objective and constitutes the fourth intervention object of the Programme.

The links between Central, Strategic and General Objectives are presented in the diagram below:



The General Objectives respond to the basic development goals of the OP strategy as set out in the preceding section (General Overview of Strategy), while also directly supporting all the General Objectives of the National Strategic Reference Framework related to the OP, as explained in summary form (with abbreviations and codes) in this section, and analyzed in more detail in section 2.3 RELEVANCE OF STRATEGY.

General Objective 1: Generation and exploitation of Innovation, supported by Research and Technological Development

The intention is to promote innovation and research & technology, and to incorporate them into the country's productive fabric as a main generator of development, upgrading and competitiveness.

General Objective 1 mainly serves the Central Development Objective. It seeks to solve the problems identified in the analysis of the current situation, particularly in respect of the issues of:

- Competitiveness, innovation and human resources.
- Competitiveness and productivity.

The General Objective entails interventions mainly in research, technological development and innovation, as basic factors in the restructuring of the Greek economy and the transition to the knowledge economy. In this sense it also confronts the issues of:

- Competitiveness and entrepreneurship
- Competitiveness and sector/industry dimension.

Finally, by seeking to leverage private resources, while pursuing the goal of extroversion, it also confronts the issue of:

- Competitiveness and public support and foreign investment,

while mainly tackling (together with the next priority) the issue of :

- Competitiveness and the Lisbon Agenda.

General Objective 1 tackles the issue of:

- Competitiveness and extroversion,

through promotion of actions to generate and adopt innovation, in collaboration with businesses, the basic criteria for selection of beneficiaries being a) the capacity for significant performance in terms of extroversion, and b) the anticipated impact on their competitiveness.

At the same time, the actions designed to attain this Objective (see below, Priority Axis 1) will strengthen international cooperation in Research and Innovation, promote internationalization of the corresponding mechanisms and act in synergy with the actions of the 7th Framework Programme.

The interventions designed to attain General Objective 1 are also subject to criteria which endow it with spatial characteristics, and thus they also tackle the issue of:

- Competitiveness and the regional dimension,

through implementation of the core and major bulk of the interventions in the area of Research and Innovation, under the direction of the competent General Secretariat but based on the regional strategies as framed in the corresponding Regional Operational Programmes after extensive consultation between the Ministry of Development and the Regional Authorities.

This objective contributes:

Mainly, to Thematic Priority 2 «Knowledge society and innovation» and General Objective 5 of the National Strategic Reference Framework (NSRF); also to Thematic Priority 1 «Investment in the productive sector of the economy» and General Objectives 1 and 2.

To the priority «Increasing productivity through tackling of the structural problems in the working of markets, investment in human capital and promotion of the Knowledge Society» of the National Reform Programme.

To the Community Strategic Guidelines for Cohesion 2007-2013, serving 1.2.1 «Increasing and improving investment in RTD», 1.2.2 «Facilitating innovation and promoting entrepreneurship» and 1.3.3 «Increasing investment in human capital by improving education and skills».

To the Integrated Guidelines for Development and Employment (IG), serving guidelines 7, 8, 9, 15, 23

General Objective 2: Strengthening entrepreneurship and extroversion

The intention is to expand outward-looking entrepreneurship as a basic way forward for the productive upgrading of the country in the direction of high added value products and services of high quality and produced with environmental sensitivity, thus contributing to the country's transition from conditions of economic recession to conditions of steady and sustainable growth .

General Objective 2 clearly serves the Central Development Objective, promoting actions to support businesses in: a) development and implementation of technological or organizational innovation, attracting foreign activity and direct investment, contributing to the technological upgrading of the productive system, b) collective business plans for clusters and networking which will help to encourage the growth of sectors, industries, networks and regions of excellence and will help them upgrade into high added value sectors and sectors incorporating high technology and applied innovation, c) integrated and innovative interventions for modernization-reorganization in the tourism sector, and d) actions increasing environmental sensitivity and appropriate measures.

The objective seeks to solve problems identified in the analysis of the current situation, within the framework of the socio-economic crisis that has developed during recent years, particularly in respect of the issues of :

- Competitiveness and extroversion

by promoting actions to support and increase productive investment, which will contribute to strengthening the presence of Greek businesses in domestic and international markets, linking the country to international integrated systems for creation of products and services and establishment of cooperative arrangements between Greek and international businesses, and upgrading/evolution of necessity entrepreneurship to high-potential entrepreneurship

- Competitiveness and productivity
- Competitiveness and entrepreneurship
- Competitiveness and sector/industry dimension.

The General Objective entails interventions which involve processing, trade, tourism and culture, services; it will tackle the issue of:

- Competitiveness and the regional dimension,

by implementing its interventions on the basis of the overall Programme strategy, as well as the regional strategies set out in the corresponding Regional Operational Programmes following extensive consultation between the Ministry of Development and the Regional Authorities,

Finally, by seeking to leverage private funds, while pursuing the goal of extroversion, it also confronts the issue of:

- Competitiveness and public support and foreign investment,

while for the most part tackling the issue of:

- Competitiveness and the Lisbon Agenda.

This objective contributes:

To Thematic Priority 1 «Investment in the productive sector of the economy», to Thematic Priority 3 «Employment and Social Cohesion» and to General Objectives 1,2,3,4, 7 and 11 of the NSRF.

To the priorities «Increasing productivity ...» and «Improving the business environment» of the National Reform Programme, and to «Increasing employment».

To Community Strategic Guidelines 1.2.2 «Facilitating innovation and promoting entrepreneurship», 1.2.4 «Facilitating access to finance», 1.1.2 «Strengthening synergies between environmental protection and development» and 1.3.2 «Improving adaptability of workers and businesses and increasing labour market flexibility».

To Integrated Guidelines 8, 9, 10, 11, 13, 15, 17 and 19.

General Objective 3: Improving the business environment

The intention is to provide all the necessary conditions for entrepreneurship - deregulation, technical infrastructures, support structures and development tools - while at the same time ensuring healthy competition and protecting consumers' rights.

General Objective 3 clearly serves the Central Development Objective. It seeks to solve the problems identified in the analysis of the current situation, mainly in respect of the issues of:

- Competitiveness and entrepreneurship
- Competitiveness and extroversion
- Competitiveness and innovation and human resources

through innovative interventions such as new financing tools (JEREMIE, guarantee and capital provision, Venture Capital, Business Angels and Mentoring, micro-credit, seed capital), support for business incubators and pre-incubators

through the development of a network of support structures for entrepreneurship in areas such as markets, technological mediation, and the promotion and dissemination of innovation

through support for Quality Infrastructures to strengthen extroversion

The General Objective is not defined in sectoral terms, i.e. it entails interventions which may cover just one sector or may be more complex, but which will involve all the areas covered by the OP. In this sense it also tackles the issue of:

- Competitiveness and the sector/industry dimension.

The General Objective entails interventions with specific spatial characteristics and thus also tackles the issue of:

- Competitiveness and the regional dimension,

through implementation of its interventions on the basis of the overall Programme strategy, as well as the regional strategies set out in the corresponding Regional Operational Programmes following extensive consultation between the Ministry of Development and the Regional Authorities,

and, mainly, through the specific siting of the infrastructures.

Finally, by seeking to leverage private funds, while pursuing the goal of extroversion, it also confronts the issue of:

- Competitiveness and public support and foreign investment,

while also tackling the issue of:

- Competitiveness and the Lisbon Agenda.

This objective contributes:

To Thematic Priorities 1 «Investment in the productive sector of the economy», 2 «Knowledge society and innovation» and, partly, 3 «Employment and Social Cohesion», 4 «Statutory Environment», 5 "Attractiveness ..." and to General Objectives 2, 3, 5, 12, and 17 of the NSRF.

To the priorities «Improving the business environment» and «Increasing productivity ...»

of the National Reform Programme.

To Community Strategic Guidelines 1.2.2 «Facilitating innovation and promoting entrepreneurship», 1.2.4 «Facilitating access to funding» and 1.1.2 «Strengthening synergies between environmental protection and development» and 1.3.2. «Improving adaptability, increasing flexibility»

- To Integrated Guidelines 7, 8, 10, 12, 13, 14, 15, and 17

General Objective 4: Integrating the country's energy system and strengthening sustainability.

The intention is to secure the country's energy supply in the context of attaining its environmental objectives, and securing inclusion in the major international electricity and natural gas networks, as preconditions for preserving growth and competitiveness.

General Objective 4 serves the Central Development Objective, since it promotes the necessary conditions for its attainment, namely securing a satisfactory energy infrastructure and supply while respecting environmental commitments. It seeks to solve certain problems identified in the analysis of the current situation in respect of issues of:

- Competitiveness and extroversion
both indirectly and directly, by strengthening the role played by the country on the energy map of the broader region, through its inclusion in major international electricity and natural gas transport networks
- Competitiveness and public support and foreign investment
by attracting Foreign Direct Investment in energy infrastructures
- Competitiveness and the regional dimension,
through implementation of specific interventions in specific regions of the country, in accordance with particular needs and on the basis of both central energy planning and the regional strategies set out in the corresponding Regional Operational Programmes.

This objective contributes

To Thematic Priority 5 «Attractiveness of Greece and its regions as a location for investment, labour and residence» and, partly, Thematic Priority 1 «Investment in the productive sector of the economy», likewise to General Objectives 14, 15, 16 and partly to General Objectives 1, 2 of the NSRF.

To the priorities «Increasing productivity ...» and «Improving the business environment» of the National Reform Programme.

To Community Strategic Guidelines 1.1.3 «Tackling the issue of intensive use of traditional energy sources in Europe», 2.3 – 2.6 «Cross-border, Trans-national, Trans-regional cooperation», and 1.1.2 «Strengthening synergies between environmental protection and development»

To Integrated Guidelines 9, 11, 14 and 16

It should be noted that beyond the 4 General Objectives mentioned above, the horizontal objective of the Operational Programme is to strengthen human resources in all areas

covered by the Programme, human resources being the main development resource and source of competitive advantages in the context of a strategy based above all on the development of innovation and the promotion, as a priority, of the knowledge economy. Given the single-fund character of the Operational Programmes of the programme period 2007-13, significant actions to strengthen human resources (vocational training, actions to promote employment and labour mobility, actions to educate researchers and place them in businesses, etc.) which in the previous programme period were included in the Operational Programme corresponding to this one, are now included, after consultation with the competent programming agencies, in the sectoral Operational Programmes being financed by the ESF. The current Programme will be able to fund, in a complementary manner and within the 10% limit on community funding for each Priority Axis (hereinafter called the 'flexibility clause') actions falling within the contribution remit of the ESF (hereinafter called 'ESF type actions') where required for the satisfactory implementation of an operation, and where directly linked to it (article 34, para. 2 of the General Regulation). Despite, then, the primary importance which the Programme strategy attaches to the human factor, and given the complementary character of the relevant ESF type interventions included within it, the objective of strengthening human resources is not elevated to the rank of a General Objective of the Programme, but is however a particularly important horizontal objective in the context of the overall national planning for the sectors in which the Programme intervenes .

2.2.3. Specific Objectives

Each of the 4 General Objectives of the Operational Programme set out above is in turn defined more narrowly in terms of Specific Objectives, which serve at the same time as the Specific Objectives of the corresponding Priority Axes and express the more particular content and targeting of the indicative interventions included under each Priority Axis/General Objective.

These Specific Objectives of the Operational Programme are as follows – for each particular General Objective:

General Objective 1: Generation and utilization of Innovation, supported by Research and Technological Development

- 1.1 Reduction of deficit in research, innovation and technology, in order to reach EU-15 average
- 1.2 Increasing business involvement in RTD and promoting more effective links between the country's research system and the productive sectors of the economy
- 1.3 Promoting excellence and the creation of excellence, generating innovation and high economic, environmental and social added value
- 1.4 Promotion of integrated systems of innovation development in regions (geographical and thematic) with a strong business base and the presence of active, extrovert research agencies
- 1.5 Expanding and enriching human research resources and strengthening the entrepreneurial spirit and its geographical and inter-sectoral mobility

General Objective 2: Strengthening entrepreneurship and extroversion

- 2.1 Support for and increase in productive investments which contribute to strengthening the competitive presence of Greek businesses in domestic and international markets. Emphasis on qualitative upgrading, standardization and certification of Greek products and businesses.
- 2.2 Focus on development endeavours towards clusters, regions and types of businesses which demonstrate the most positive prospects or have the greatest need – Reorientation of manufacturing activity and its ‘traditional’ sectors towards higher added value sectors and products.
- 2.3 Restructuring and supporting enterprises facing significant problems due to the financial crisis through targeted actions. The gradual addressing of these problems will lead to the development of enterprises and the enhancement of their competitive position in the domestic and international market .
- 2.4 Upgrading / evolution of necessity entrepreneurship to high-potential entrepreneurship – Upgrading of the business base in sectors lagging behind in respect of development of entrepreneurship or operating in outdated forms
- 2.5 Strengthening the role of commerce and accompanying services in the productive system, with the emphasis on support for investment plans to strengthen the competitive presence of Greek businesses in domestic and international markets
- 2.6 Extending networks of industry – trade - services
- 2.7 Strengthening entrepreneurship in the tourism sector, giving priority to projects which seek the qualitative upgrading and differentiation of the tourist product, the extension of the tourist season across the whole country and the development of special forms of tourism
- 2.8 Business utilization of the environment as a tool for attracting domestic and foreign investments
- 2.9 Upgrading of human resources, with targeted actions which act in synergy with the other actions in the Priority Axis

General Objective 3: Improving the business environment

- 3.1 Upgrading and simplification of the business environment and the regulatory framework, institutions and structures which support business activity – Improved planning provisions for economic activity
- 3.2 Development and utilization of contemporary financial support tools for business ventures and improving access to funding for micro-enterprises, small and medium-sized enterprises that are active in GreeceSupport of the system of support structures for entrepreneurship, in order to provide effective, reliable services to the business community.
- 3.3 Strengthening of infrastructures which support quality entrepreneurship and create economies of scale and purpose, strengthen cooperation with public or other knowledge-generating agencies and mediate in the transfer and dissemination of innovation
- 3.4 Upgrading mechanisms to oversee the market, stimulate competition, upgrade the quality of Greek products and services and strengthen and safeguard consumer rights
- 3.5 Promotion of the country's tourist product, including special forms of tourism and quality, brand-name Greek products
- 3.6 Strengthening of infrastructures to exploit cultural wealth and natural heritage of the country.
- 3.7 Upgrading of human resources, with targeted actions working in synergy with the other actions in the relevant Priority Axis.

General Objective 4: Integrating the country's energy system and strengthening sustainability

- 4.1 Ensuring the energy supply and reducing the country's dependence on oil, promoting electricity and natural gas networks, further penetration of RES in the energy balance, saving energy and improving energy efficiency in the building sector .
- 4.2 Consolidating the geo-strategic role of the country on the energy map of the broader region, joining up to the major international electricity and natural gas supply networks.
- 4.3 Exploiting new technologies to modernize and improve the security of energy networks.
- 4.4 Rational management of natural resources.

2.3. RELEVANCE OF STRATEGY

2.3.1. Relevance to the National Reform Programme, the Priorities of the European Employment Policy, the Strategic Guidelines for Cohesion and the Revised Lisbon Agenda

The Greek National Reform Programme (NRP) 2005-2008 covers the initial years of implementation of the programme period 2007-2013 of the Structural Funds and the NSRF. A significant number of policies, development tools and interventions included in the NRP are already served by the OP Competitiveness 2000 - 2006 and a significant proportion of them will be co-funded by the new Programme, whose interventions will make a direct and significant contribution to the 2nd, 3rd and 4th priorities of the NRP.

Specifically:

- ✓ The interventions to increase and improve investment in Research & Development and Knowledge and Innovation (necessary under the NRP) essentially make up the 1st Priority Axis of the Programme and will serve as an important tool in attaining the national objective of the NRP, i.e. increasing spending on research and promoting its strategy.
- ✓ The NRP strategy for the Business Environment (chap. 3 NRP) is served by the 3rd Priority Axis of the Programme, while the objectives of the NRP for the Knowledge Society (chap. 4 NRP) are promoted through the 1st Priority Axis of the Programme.
- ✓ The targets set by the NRP for Regional and Social Cohesion (chap. 7 NRP) are served horizontally by all the Priority Axes of the Programme, with appropriate tackling of the issue of discrete allocation of the resources of the Structural Funds to the 'transitional' regions.

The priorities of the European Employment policy are promoted through categories of Actions for :

- ✓ Improving the quality of labour, and thus the productivity of labour
- ✓ Strengthening the adaptability of businesses and the workforce in the changing conditions of international competition and changes in technology and production
- ✓ Reducing social exclusion and improving social cohesion,

which will be implemented in the context of the flexibility clause in Axes 1, 2 and 3 of the Programme.

In respect of the Integrated Guidelines for Development and Employment, which attach key significance to strengthening employment through legislative changes to promote employment, greater flexibility and adaptability and the acquisition of skills and qualifications, the proposed interventions in the same Axes are also well aligned. The investments to strengthen employment and entrepreneurship will also contribute to attaining the objective of the NRP that overall and women's employment will both be increased by 2010.

In overall terms the EU's Integrated Guidelines -both the microeconomic guidelines and employment guidelines- are fully served through the totality of priorities in the Programme, in the areas:

- √ Research and technology (IG 7-9) in the 1st Priority Axis
- √ Business environment (IG 10, 12-15) in the second, and especially in the 3rd, Priority Axis
- √ Infrastructures (IG 16) in the 4th Priority Axis.

Entrepreneurship, innovation, development of a knowledge society, social cohesion and environmental sustainability all presuppose a healthy macroeconomic environment which will ensure viability and stability.

Conversely, the overall compliance of the NSRF and NRP with the Integrated Guidelines on the macroeconomic environment (IG 1-6) and IG 12, 13, 22 provides a necessary condition for the success of the Programme and for securing a real development result:

- √ On the one hand they contribute to the removal of factors which act as obstacles to development (public finance deficit, contraction of production base, backward technology and low performance in innovation, conditions for creation of employment)
- √ On the other hand they are required to contribute in such a way that the Programme interventions, which are extremely limited in terms of funding, both in terms of needs and in terms of the volume of other parallel interventions, will play a genuinely catalytic role.

RELEVANCE OF OBJECTIVES OF THE OPERATIONAL PROGRAMME WITH THE PRIORITIES OF THE NRP

OBJECTIVES OF THE OPERATIONAL PROGRAMME		Restoration of balanced public finances and securing long-term viability of public finances	Increasing productivity by tackling the structural problems in operation of markets, investing in human capital and promoting the Knowledge Society	Improving the business environment, strengthening competition, opening up markets, increasing extroversion and capitalizing on the geopolitical position of the country to attract investment activities with prospects for expansion into the broader region of SE Europe	Increasing employment, reducing unemployment and more effective operation of education and training systems with a series of targeted actions which will also limit the risk of social exclusion
General Objective 1	1.1	INDIRECT	X		
	1.2		X		
	1.3		X		
	1.4		X		
	1.5		X		
General Objective 2	2.1			X	
	2.2.		X		
	2.3.			X	
	2.4.		X	X	
	2.5.			X	
	2.6.		X		
	2.7.		X	X	
	2.8.			X	
	2.9.		X		X
General Objective 3	3.1.			X	
	3.2.		X	X	
	3.3.			X	
	3.4.		X	X	
	3.5.		X	X	
	3.6.			X	
	3.7.			X	
	3.8		X		X
General Objective 4*	4.1.			X	
	4.2.			X	
	4.3.			X	
	4.4.			X	

* The Specific Objectives of General Objective 4 are relevant to the content of chap. 6 of the NRP (Environment and sustainable growth)

**RELEVANCE OF THE OBJECTIVES OF THE OPERATIONAL PROGRAMME WITH THE INTEGRATED
GUIDELINES FOR DEVELOPMENT AND EMPLOYMENT**

MICROECONOMIC GUIDELINES																										
General and Specific Objectives	1					2									3								4			
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4
(7) Increasing and improving investment in RTD, especially by businesses	X	X	X	X	X													(X)								
(8) Facilitating all forms of innovation	X	X	X	X	X	X	X		(X)		(X)	(X)				X		X								
(9) Facilitating dissemination and use of ICTs, building the Information Society	(X)	(X)	(X)	(X)			(X)																		X	
(10) Strengthening comparative advantages of the European industrial base	X	X		X		X	X	X			(X)				(X)											
(11) Encouraging sustainable exploitation of resources and synergy of environmental protection and development													X										X			X
(12) Expanding and consolidating the Internal Market																			X							
(13) Securing open competitive markets and exploiting the potential of globalization								X		X									X							
(14) Creating a competitive business environment and encouraging private initiative through an improved regulatory framework															X				X				X			
(15) Promoting a more entrepreneurial culture and creating supportive environment for SMEs	(X)	(X)		X					X		X	X			X	X	X	X		(X)	X					

[illegible]

RELEVANCE OF OBJECTIVES OF OPERATIONAL PROGRAMME WITH INTEGRATED GUIDELINES FOR DEVELOPMENT AND EMPLOYMENT

[illegible]

RELEVANCE OF OBJECTIVES OF OPERATIONAL PROGRAMME WITH COMMUNITY STRATEGIC GUIDELINES

	1					2									3								4				
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4	
GUIDELINE: Making Europe and its regions more attractive places for investment and employment																											
1.1.1 Extension and improvement of transport infrastructures																											
1.1.2 Strengthening synergies between environmental protection and development														X							(X)					(X)	
1.1.3 Tackling intensive use of traditional energy sources																							X	X	X		
GUIDELINE: Improving knowledge and innovation to promote growth																											
1.2.1 Increasing and improving objectives of investment in RTD	X	X	X	X																							
1.2.2 Facilitating innovation and promotion of entrepreneurship	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X							
1.2.3. Promotion of Information Society for all																											
1.2.4. Improving access to finance									X						X												
GUIDELINE: More and better jobs																											
1.3.1 Attracting and retaining more people in labour market.....																											
1.3.2. Improving adaptability, increasing flexibility.....									X					X							X						
1.3.3. Increasing investment in human capital through improved education...					X																						
1.3.4. Administrative skills																											
1.3.5. Protecting workers' health																											
THE TERRITORIAL DIMENSION OF COHESION POLICY																											
2.1. Contribution of the cities to growth and employment																											
2.2. Support for economic differentiation of rural regions,																											
2.3 – 2.6. Cross-border, Trans-Regional, Trans-national cooperation																								X			

OVERALL RELEVANCE OF OPERATIONAL PROGRAMME WITH REVISED LISBON AGENDA

Focusing investment on driving forces for growth (Human Resources, Entrepreneurship and Competitiveness)	Direct
Interventions which contribute to transition to Knowledge Economy, with investment in ICTs, R&TD and human resources	Direct
Investment in sectors with potential comparative advantages, and focusing endeavours on internationally competitive sectors	Direct
Mobilization of additional resources	Direct
Improving governance	Indirect
Strengthening regional and local dimension of Lisbon Strategy	Direct
Making Greece more attractive to foreign investment and improving its appeal as a place for investment and employment	Indirect
Contributing to creation of more and better jobs	Direct
Improving and simplifying the regulatory framework in which businesses operate	Indirect
Integration of internal market in services	Indirect
Removing obstacles to mobility of persons, workers and academics	Indirect
Support for efforts to tackle social consequences of economic restructuring	Indirect

**CONTRIBUTION OF OPERATIONAL PROGRAMME TO NATIONAL PERFORMANCE IN RELATION TO OBJECTIVE
ATTAINMENT INDICATORS OF REVISED LISBON AGENDA**

Promotion of Information Society	Indirect
Development of Innovation, R&D	Direct
Deregulation of markets	Direct
Promotion of Business Networks	Direct
Development of new Financial Services	Direct
Improvement of Business Environment	Direct
Promotion of Inclusive Society	Indirect
Sustainable Growth	Direct

2.3.2. The Programme and the National Strategic Reference Framework (NSRF)

The Programme in question is the tool par excellence to be used by the NSRF in supporting its central initial strategic aspiration : "Expanding the development potential of the country, speeding up the rate of economic growth and increasing productivity to levels higher than the community average, in order to achieve real convergence and improve the quality of life of all citizens without exclusions: the Greece of the new period 2007-2013 – an extrovert country, with a powerful international presence; a country which is productive, competitive and emphasises quality and innovation". The relevance to the NSRF can be seen even in the Analysis stage, where in the NSRF one can identify factors as important to competitiveness as:

- √ Small share of global exports of products and services
- √ Negative trade balance
- √ Low degree of extroversion in the economy
- √ Considerable changes in geographical distribution of exports
- √ Particularly poor performance in attracting FDI
- √ Negative rates of growth and destabilization of the macroeconomic environment
- √ High level of spending on innovation (as % of sales' value) by businesses engaged in innovative activities, but low overall level of innovation
- √ Existence of basic weaknesses on part of businesses failing to strengthen their position in the international environment, and the structure of productive fabric (prevalence of SMEs and Micro-Enterprises)
- √ Absence of new orientation for restructuring of business activities in order to strengthen productivity
- √ Low level of development of ecological and 'green' entrepreneurship
- √ The strategic position of the country in respect of supply with natural gas, the existence of alternative suppliers and the lack of actual competition in the electricity market, as well as the low level of generation of power from RES
- √ The significant position of the country in European and global tourism rankings and the major contribution of tourism to GDP and to the preservation of jobs , but also the absence – until recently – of strategic planning for the sector and the low level of differentiation of the tourist product.

The Programme is required to serve, mainly, 4 Thematic Priorities of the NSRF:

- √ Thematic Priority 1: Investment in the productive sector of the economy,
- √ Thematic Priority 2: Knowledge society and innovation,
- √ Thematic Priority 4: Statutory Environment, and
- √ Thematic Priority 5: Appeal of Greece and its regions as places to invest, work and live.

Thematic Priority 3, on employment and cohesion, is mainly covered under General Objective 8 of the Programme.

It is also this particular Programme which is mainly called on to implement two of the five Thematic Priorities of the NSRF:

- ✓ Thematic Priority 1: Investment in the productive sector of the economy
- ✓ Thematic Priority 2: Knowledge society and innovation.

More specifically:

- ✓ In the Thematic Priority " Investment in the productive sector of the economy", the Programme will undertake most of the implementation of the following general objectives:

Increasing extroversion and inflows of Foreign Direct Investment

Development of entrepreneurship and increasing productivity

Differentiation of the country's tourist product

- ✓ In the Thematic Priority " Knowledge society and innovation", the Programme will undertake most of the implementation of the general objective:

Support for Research, Technology and promotion of Innovation in all sectors as a key factor in restructuring the Greek economy and in the transition to the knowledge economy.

Furthermore, there is a considerable degree of compatibility – or even identity – between other general objectives of the NSRF and those of the Programme: for example -

- ✓ In the Thematic Priority " Knowledge society and innovation ":
Digital convergence of country with incorporation and systematic use of ICTs in sectors of social and economic activity («improving productivity through use of ICTs and new skills»)
- ✓ In the Thematic Priority "Employment and social cohesion":
Strengthening adaptability of workers and businesses («strengthening adaptability of businesses»).
- ✓ In the Thematic Priority "Statutory environment":
Improving quality of public policies and their effective implementation to upgrade the quality of life of the country's citizens and facilitate entrepreneurial activities.
- ✓ In the Thematic Priority "Appeal of Greece and its regions as a place to invest, work and live":
-A safe energy supply for the country, based on sustainability.
-Sustainable management of the environment («water resource management»).
- Highlighting of culture as a vital factor in the country's economic growth («strengthening cultural infrastructures, stimulating demand in the cultural sector»).

RELEVANCE OF OBJECTIVES OF OPERATIONAL PROGRAMME WITH THE OBJECTIVES OF THE NSRF 2007-2013

NSRF OBJECTIVES	1					2									3								4			
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4
G.O.1: Increasing extroversion and inflows of FDI	X	X		X		X	X			X	X												X			
G.O. 2: Development of entrepreneurship and increasing productivity		X		X			X	X	X			X	X		X	X	X	X	X				X			
G.O.3: Differentiation of the country's tourist product												X							X							
G.O.4: Improvement in quality and level of investment in human capital to upgrade Greek education system.																										
G.O.5: Strengthening Research and Technology and promotion of innovation in all sectors as key factor in the restructuring of the Greek economy and transition to the knowledge economy	X	X	X	X	X											X		X								
G.O.6: Digital convergence of the country through incorporation and systematic use of ICTs in areas of social and economic activity						X	X	X	X	X	X				X										X	
G.O.7: Strengthening adaptability of workers and businesses														X								X				
G.O.8: Facilitating access to employment																										

NSRF OBJECTIVES	1					2									3								4			
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	1	2	3	4
G.O.9: Promotion of social inclusion																										
G.O.10: Founding of an efficient and economically viable health system offering quality, individually tailored services to the public and focused on ongoing improvement of preventive and care services																										
G.O.11: Highlighting economic, social and developmental character of gender equality issues, directly linking them to national policy priorities									X																	
G.O.12: Improving quality of public policies and their effective implementation to upgrade the quality of life of the country's citizens and to facilitate entrepreneurial activity															X	X	X	X	X							
G.O.13: Development and modernization of physical infrastructures and related services of the country's transport system																										
G.O.14: Secure energy supply for the country, based on sustainability																							X	X	X	
G.O.15: Sustainable management of the environment																							X			X
G.O.16: Implementation of an effective environmental policy															X								X			
G.O.17: Highlighting of culture as a vital factor in the economic growth of the country																					X					

2.3.3. *The Programme and Sustainable Development*

Social and environmental protection and development can be achieved through preserving or increasing physical and social capital. Following this basic principle, the strategy of the Operational Programme is designed to develop all four kinds of capital (Financial, Labour, Social, Environmental) by providing incentives and 'tools' for the implementation of actions which will lead to sustainable development. More narrowly defined actions appropriate to special conditions, modes of approach, terms and constraints will be decided on the basis of the Strategic Environmental Assessment, and by using the special environmental terms to be laid down for each project or activity in the programme, during the implementation phase, in accordance with national and European legislation on environmental licensing.

The environmental dimension and the Göteborg priorities will be incorporated in all the Programme priorities, promoting the inclusion of the environmental dimension in business activity, strengthening business activity in the area of environmentally friendly products, processes and services, and ensuring further development of the necessary environmental infrastructures in the direction of full implementation of European environmental legislation in respect of productive activity.

These issues are tackled specifically through special Actions in the following categories :

- √ "Knowledge-Excellence" and "Value" of Priority Axis 1 «Generation and utilization of innovation, supported by Research and Technological Development»
- √ Business utilization of the environment as a tool to attract domestic and foreign investment of Priority Axis 2 «Strengthening entrepreneurship and extroversion»
- √ Modernization of business infrastructures of Priority Axis 3 «Improving business environment»
- √ Promotion of use of natural gas, penetration of renewable energy sources and energy saving, strengthening of special investments in the oil sector, protection of the environment, rational management of natural resources, of Priority Axis 4, «Integration of energy system and strengthening of sustainability».

The actions for the knowledge economy are of a 'horizontal' character. In the Operational Programme there is no reference to individual sectors, but an action is included which involves support for various sector policies through RTD and relevant studies, which provides the opportunity to design individual actions in cooperation with the competent political authorities and to issue calls for programmes to study, protect and upgrade the natural and urban environment.

Sustainable development is directly related with improved competitiveness of the tourist product. Qualitative upgrading, utilization of the natural and cultural heritage to strengthen the tourist product and actions targeted to dynamic development of special forms of tourism, including marine tourism, nature tourism, eco-tourism and agrotourism, all create the conditions for the highlighting and protection of the country's natural resources and the cultivation of environmental awareness in the public.

In particular, of course, sustainable development is directly linked with integration of the energy system (Axis 4) and its strengthening is a priority of the Programme. Specifically, sustainability is tackled through each of its internationally recognized dimensions, as follows:

- ✓ Economic: Security of the energy supply and strengthening of the country's geo-strategic role are of great importance in the economic dimension of sustainability.
- ✓ Social: Promotion of electricity and natural gas networks will contribute to improving the quality of the energy services provided, and thus contribute to the social dimension of sustainability.
- ✓ Environmental: The objectives and actions related to the promotion of RES and the rational management of natural resources are directly linked to the environmental dimension of sustainability.

2.3.4. Promotion of gender mainstreaming and equal opportunities

Gender equality is a fundamental right and shared value of the European Union, and a necessary condition for achievement of the objectives of growth, employment and social cohesion. Although progress has been made in involvement of women in basic areas of the Lisbon Strategy, the same cannot be said of the position of women in the labour market. This failure means a vital loss of human resources, in the context of a shrinking labour force, an ageing population and low birth rates. It is why the Revised Lisbon Strategy draws a direct link between the competitiveness of the EU economies and their capacity to make full use of their entire productive capacity. This stance was emphasized at the Spring Summit of March 2006, when the European Pact on Gender Equality was adopted and commitments entered into to implement policies to strengthen women's employment in order to support the economic growth, prosperity and competitiveness of the Union.

Bearing in mind the context of Article 16 of Reg. 1083/2006 on gender equality and non-discrimination, as well as the approach of General Objective 11 of the NSRF, the Operational Programme Competitiveness and Entrepreneurship ensures:

- ✓ Promotion of gender equality through specific actions included therein
- ✓ Incorporation of the gender dimension in all its interventions

In planning the Priority Axes account was also taken of the Council Integrated Guidelines for Growth and Employment 2005-2008, the priorities of the National Reform Programme for Social Cohesion, as defined in the National Action Plans for Employment and Social Inclusion, and the proposals of the General Secretariat for Equality. Specifically, and in respect of the priority axes of the Programme, gender equality is promoted mainly through the following directions:

- ✓ Promotion of entrepreneurship among women (founding of new businesses)
- ✓ Strengthening women's entrepreneurship through entrepreneurship support structures and tools
- ✓ Support for women's initiatives and activities in the field of the social economy

In planning the Operational Programme Competitiveness and Entrepreneurship 2007-2013 account was taken of the principles of non-discrimination and accessibility for the disabled, as required by Article 16 of the General Regulation.

There are now some 50 million disabled persons in the European Union, while it is estimated that persons over 65 (also affected by accessibility issues) will account for 40% of the total population within the next 25 years, i.e. double the present percentage. These factors cannot be overlooked in planning actions to support the business environment, which will need to ensure access to these people as potential customers and support them as potential entrepreneurs and active productive forces.

In planning the priorities of the OP Competitiveness and Entrepreneurship, promotion of equal opportunities has been ensured through:

- √ Promotion of entrepreneurship of special groups (founding of new businesses)
- √ Taking measures to ensure minimization of obstacles, increased accessibility of structures and services for vulnerable social groups, especially to structures and services in tourism and the arts.

2.4 CONTRIBUTION OF THE PROGRAMME TO THE ATTAINMENT OF NATIONAL OBJECTIVES

2.4.1 *Internal cohesion of the Programme to ensure its contribution to the National Objectives*

The OP Competitiveness and Entrepreneurship involves a significant number of sectors of the economy and therefore its strategy is called on to serve a large number of different needs and objectives. Its strategy thus seeks to separate as clearly as possible the various different objectives, setting discrete (general) targets for each of the four pillars of the Programme:

GO.1 Generation and utilization of Innovation, supported by Research and Technological Development

GO.2 Strengthening entrepreneurship and extroversion

GO.3 Improving the business environment

GO. 4 Integration of the country's energy system and strengthening sustainability.

General Objective 1 is focused particularly on achievement of Strategic Objective 1 (Speeding up transition to knowledge economy). Its attainment **ensures** the achievement of Strategic Objective 1, while at the same time it provides **significant support** (whether as a contribution or a catalyst) to attainment of Strategic Objective 2, and **indirectly** to attainment of Strategic Objective 3.

In respect of the Specific Objectives which contribute to the attainment of General Objective 1:

SO.1.1 Reduction of deficit in research, innovation and technology, rising to the level of the EU-15 average.

SO.1.2 Increasing business involvement in RTD; more effective links between country's research system and the productive sectors of the economy.

SO.1.3 Strengthening of excellence and creation of excellence in areas producing innovation and high economic, environmental and social added value.

SO.1.4 Promotion of integrated systems for development of innovation in areas (geographical and thematic) with a powerful business base and the presence of active and extrovert research agencies

SO.1.5 Enlargement and enrichment of human research resources and strengthening of entrepreneurial spirit and its geographical and inter-sectoral mobility.

It is obvious that the five Specific Objectives function in combination, complementing one another, and it is expected that this will have an amplifier effect on attainment of General Objective 1.

Attainment of Specific Objective 1.1 is a necessary condition for achievement of General Objective 1, while also serving as a critical indicator of General Objective 1, although the

relative position of the country in respect of the EU average depends also on the progress made by the other member states.

Specific Objective 1.2 is the objective which contributes more than any other to the attainment of General Objective 1 in practice, given that it ensures linking of entrepreneurship with RTD on a bilateral basis, as well as the real involvement in practice of businesses in RTD, factors which are particularly important for competitiveness.

The critical contribution of the attainment of Specific Objectives 1.3 and 1.4 to the achievement of General Objective 1 involves the restructuring of the Greek economy and an increase in extroversion, given that the attainment of these two Specific Objectives (which complement one another to a great extent) ensures the possibility of reorienting the economy towards more innovative areas with high added value, and decentralization of innovation in both geographical and thematic (sectoral) terms.

Attainment of Specific Objective 1.5 functions purely as a support for achievement of General Objective 1.

An indirect but significant contribution to attainment of General Objective 1 is made by some of the other Specific Objectives designed to support achievement of other General Objectives:

- SO2.2 Focusing of development endeavour on clusters, areas and types of business demonstrating the most positive prospects or with the greatest needs – Reorientation of processing activity and its 'traditional' sectors to sectors and products with higher added value.
- SO2.4 Upgrading / development of necessity entrepreneurship to high-potential entrepreneurship – Upgrading of the business base in sectors lagging behind in development of entrepreneurship or operating in outdated forms.
- SO3.2 Development and use of contemporary financial support tools, for undertaking of business risk and improved access to financing for micro-enterprises and SMEs active in Greece
- SO3.3 Supporting the system of structures that strengthen entrepreneurship with a view to providing reliable and effective services to the business community
- SO3.4 Strengthening infrastructures which support quality entrepreneurship and create economies of scale and purpose, strengthen cooperation with public or other knowledge-creation agencies and act as intermediaries in transference and dissemination of innovation
- SO4.3 Utilization of new technologies for modernization and improved security of energy networks.

General Objectives 2 and 3 are focused on attainment of Strategic Objective 2 (Development of healthy, sustainable and extrovert entrepreneurship and ensuring of the physical, statutory and organizational conditions which serve it).

The following Specific Objectives contribute, in combination and complementing one another, to attainment of General Objective 2:

- SO2.1 Support for and increase in productive investments contributing to a more competitive Greek business presence in domestic and international markets. Emphasis on qualitative upgrading, standardization and certification of Greek products and businesses.
- SO2.2 Focusing on development endeavour for clusters, areas and types of business demonstrating the most positive prospects or with the greatest needs – Reorientation of processing activity and its 'traditional' sectors to sectors and products with higher added value.
- SO1.3 Strengthening of excellence and creation of excellence in areas producing innovation and high economic, environmental and social added value.
- SO2.3 Use targeted actions to restructure and strengthen enterprises which face significant problems due to the economic crisis. Progressively dealing with these problems will lead to the development of enterprises and the strengthening of their competitive position in the domestic and international market.
- SO2.4 Upgrading / development of necessity entrepreneurship to high-potential entrepreneurship – Upgrading of the business base in sectors lagging behind in development of entrepreneurship or operating in outdated forms.
- SO1.2 Strengthening business involvement in RTD and more effective links between the country's research system and productive sectors of the economy.
- SO1.4 Promotion of integrated systems for development of innovation in areas (geographical and thematic) with a powerful business base and the presence of active and extrovert research agencies
- SO2.5 Strengthening the role of trade and accompanying services in the productive system, with the emphasis on strengthening investment plans to improve the competitive presence of Greek businesses in domestic and international markets
- SO2.6 Expanded networking of industry-trade-services
- SO2.7 Support for entrepreneurship in tourism sector through promotion, above all, of plans seeking qualitative upgrading and differentiation of the tourist product, expansion of the tourist season across the country and development of special forms of tourism.
- SO2.8 Business utilization of the environment as a tool for attracting domestic and foreign investment.

The following Specific Objectives make an indirect contribution:

- SO3.1 Upgrading and simplification of the business environment and the regulatory framework, institutions and structures which support business activity – Improved planning provisions for economic activity
- SO3.2 Development and use of contemporary financial support tools, for undertaking of

business risk

SO3.3 Establishment of a single, networked and rational system of support structures for entrepreneurship, in order to provide effective, reliable services for businessmen and investors in the form of a one-stop shop

SO3.4 Strengthening infrastructures which support quality entrepreneurship and create economies of scale and purpose, strengthen cooperation with public or other knowledge-creation agencies and act as intermediaries in transference and dissemination of innovation

SO2.9 Upgrading of human resources, with targeted actions operating in synergy with other actions in the Priority Axis.

The following Specific Objectives contribute, in combination and complementing one another, to the attainment of General Objective 3:

SO3.1 Upgrading and simplification of the business environment and the regulatory framework, institutions and structures which support business activity – Improved planning provisions for economic activity

SO3.2 Development and use of contemporary financial support tools, for undertaking of business risk

SO3.3 Establishment of a single, networked and rational system of support structures for entrepreneurship, in order to provide effective, reliable services for businessmen and investors in the form of a one-stop shop

SO3.4 Strengthening infrastructures which support quality entrepreneurship and create economies of scale and purpose, strengthen cooperation with public or other knowledge-creation agencies and act as intermediaries in transference and dissemination of innovation

SO3.5 Upgrading of mechanisms to oversee the market, strengthen competition, upgrade the quality of Greek products and services, and strengthen and safeguard consumer rights

SO3.6 Promotion of country's tourist product, including special forms of tourism and brand-name, quality Greek products

SO3.7 Strengthening infrastructures capitalizing on the country's cultural wealth and natural heritage.

The following Specific Objectives contribute indirectly to the attainment of General Objective 3:

SO1.2 Increasing business involvement in RTD and more effective links between country's research system and productive sectors of the economy

SO2.1 Support for and increase in productive investments contributing to a more competitive Greek business presence in domestic and international markets. Emphasis on qualitative upgrading, standardization and certification of Greek products and

businesses.

SO2.2 Focusing on development endeavour for clusters, areas and types of business demonstrating the most positive prospects or with the greatest needs – Reorientation of processing activity and its ‘traditional’ sectors to sectors and products with higher added value.

SO2.4 Upgrading / development of necessity entrepreneurship to high-potential entrepreneurship – Upgrading of the business base in sectors lagging behind in development of entrepreneurship or operating in outdated forms

SO2.6 Expanded networking of industry-trade-services

SO2.7 Support for entrepreneurship in the tourism sector through promotion, above all, of plans seeking qualitative upgrading and differentiation of the tourist product, expansion of the tourist season across the country and development of special forms of tourism.

SO2.8 Business utilization of the environment as a tool for attracting domestic and foreign investment.

SO3.8 Upgrading of human resources, with targeted actions functioning in synergy with other actions in the relevant Priority Axis

Attainment of General Objective 4 is a necessary condition for the achievement of Strategic Objective 3 (Making Greece a more attractive location for development of business activity, with respect for the environment and sustainability). Its attainment will support (indirectly, but in a decisive way) the achievement of the other two Strategic Objectives, creating the infrastructures and conditions which facilitate both the development of entrepreneurship across the country and the acceleration of the transition to the knowledge economy.

In respect of Specific Objectives contributing to the attainment of General Objective 4:

SO4.1 Ensuring the energy supply and reducing the country's dependence on oil, promoting electricity and natural gas networks, higher penetration of renewable energy sources in the energy balance, energy saving and improving energy efficiency

SO4.2 Consolidating the geo-strategic role of the country on the energy map of the broader region, joining up to the major international electricity and natural gas transportation networks

SO4.3 Using new technologies to modernize and improve security of energy networks

SO4.4 Rational management of natural resources,

Attainment of General Objective 4 depends on achieving Specific Objectives 4.1 and 4.2, which are a vital factor in attainment of the country's objectives and international commitments in respect of the environment. Specific Objectives 4.3 and 4.4 function in support of attainment of General Objective 4.

An important contribution to attainment of General Objective 4 is to be made by Specific Objective 2.8 Business utilization of the environment as a tool for attracting domestic and

foreign investment, which will assist in attainment of General Objective 2.

2.4.2. Complementarities and synergies of Programme objectives with those of Regional and other Sectoral Programmes

The nature and content of the objectives of the OP Competitiveness and Entrepreneurship, the breadth of sectors in which it intervenes, the horizontal character of the interventions in both sectoral and geographical terms, and the host of agencies which benefit from the interventions, all give the Programme a high degree of affinity with a number of other Operational Programmes. In this paragraph we shall examine the complementarity of the OP Competitiveness and Entrepreneurship objectives with those of other, related, Programmes, and the synergies which can be generated (and which are pursued) to ensure full attainment of the national objectives of the NSRF.

Regional Operational Programmes

The structure and rationale of the strategy of the Regional Operational Programmes varies depending on the needs, priorities and development vision of each region. Nevertheless, the priorities and intervention sectors of the OP Competitiveness and Entrepreneurship are key elements in the strategy of the regional Programmes, thereby ensuring combined intervention on both the horizontal (national) and specific (regional) level.

This is clear from the comparison of the Strategic Objectives of the OP Competitiveness and Entrepreneurship with those of the Regional Operational Programmes. It is evident that there is complementarity of strategy and synergy of planning between the Regional Operational Programmes and the OP Competitiveness and Entrepreneurship, on the basis of Strategic Objectives of the Regional Operational Programmes such as: improving competitiveness and strengthening extroversion (ROP Macedonia-Thrace), development of viable and extrovert entrepreneurship, promotion and linking of innovation and research with entrepreneurship, strengthening of productive activities and increasing appeal of regions as places to live, invest and do business (ROP Crete and Aegean), strengthening the competitiveness, attractiveness and outward orientation of the economy, with the emphasis on investment in knowledge, innovation and networks (ROP Thessaly-Central Greece-Epirus).

From the comparison of the General Objectives of the OP Competitiveness and Entrepreneurship with those of the ROP, there is clear complementarity of strategy and synergy of planning between the ROPs and the OP Competitiveness and Entrepreneurship. For example:

- In the General Objectives of the ROP Attica emphasis is laid on improving competitiveness by encouraging innovation, RTD and entrepreneurship.
- The ROP Macedonia-Thrace, which has selected General Objectives more specifically targeted to its regions and to specific actions, seeks, inter alia, to strengthen competitiveness in Central Macedonia, to enhance extroversion in Western Macedonia, to adapt the productive structure related to energy to international requirements, and so on.
- The ROP Crete-Aegean seeks to strengthen entrepreneurship, foster innovation and strengthen the knowledge society, while also attracting high added value investment.

- In the ROP Thessaly-Central Greece-Epirus the range of objectives of the OP Competitiveness and Entrepreneurship is contracted to one General Objective, which focuses on competitiveness, extroversion and innovation.
- The General Objective of the ROP Western Greece, Peloponnese and Ionian Islands 'the expansion of development opportunities, acceleration of rate of economic expansion and social development, and increased productivity to attain real convergence and improve the quality of life of local people' demonstrates clear affinity with the General Objectives of the OP Competitiveness and Entrepreneurship.

The complementarity and synergy of the objectives of the OP Competitiveness and Entrepreneurship with those of the Regional Operational Programmes of the 5 Transition Regions is illustrated in the tables given in Annex 4.

Sectoral Operational Programmes

Those of the Operational Programmes which will most fully complement the OP Competitiveness and Entrepreneurship are the Programmes Digital Convergence, Development of Human Resources, Education and Lifelong Learning, and Environment.

In the case of the sectoral OPs, the synergy of planning and complementarity of strategies are not so easy to see on the level of Strategic and General Objectives, but are ensured on the level of thematic priorities and actions. For example:

- In respect of the transition to the knowledge economy, the OP 'Competitiveness and Entrepreneurship' and OP 'Education and Lifelong Learning' complement one another: while the OP Competitiveness and Entrepreneurship focuses, in the context of its priorities, on strengthening RTD and innovation in all sectors as a basic factor in restructuring the economy and transition to the knowledge economy, the OP Education and Lifelong Learning focuses on promotion of research and innovation – speeding up the transition to the knowledge economy and society through strengthening of university research.
- In respect of competitiveness and extrovert entrepreneurship, the OP Development of Human Resources and the OP Digital Convergence complement the OP Competitiveness and Entrepreneurship. In respect of improvement of the entrepreneurial environment the OP Competitiveness and Entrepreneurship functions as a complement to the OP Improvement of the Administrative Capacity of the Public Administration.
- In respect of sustainability and the environment, the OP Competitiveness and Entrepreneurship functions in support of the OP Environment, mainly through General Objective 4 'Integration of the country's energy system and strengthening of sustainability', as well as Specific Objectives 4.1 'Security of energy supply, reducing country's dependence on oil, promoting natural gas and electricity networks and securing further penetration of RES into the energy balance, as well as saving energy and improving energy efficiency' and 4.4 'Rational management of natural resources'. Its other Specific Objectives (e.g. 4.2, 4.3, 2.8 etc.) also play a supportive role.

2.5. EX-ANTE EVALUATION OF THE OPERATIONAL PROGRAMME

CONCISE SUMMARY

INTRODUCTION – OVERALL PICTURE

Pursuant to the provisions of the 3rd Circular of the Ministry of Economy and Finance, and the relevant European Commission working paper, the ex-ante evaluation of the OP Competitiveness and Entrepreneurship was conducted during finalization of the Programme and thus its observations and recommendations were used as input to the final version of the Programme. In brief, the ex-ante evaluation mainly pertained to the first draft of the OP and the Consultant's activities were focused on cooperation with the Programme Planning Team (OSPA) in improving the Programme and preparing the final draft.

The contribution of the ex-ante evaluation involved all chapters of the first draft of the Programme, sometimes purely critically, with observations and recommendations for additions/corrections to the existing texts (e.g. in the first chapters Analysis of Current Situation, Objectives, etc.), sometimes with a significant contribution to the elaboration and formulation/phrasing of the texts (e.g. Indicators, etc.).

In carrying out this work the Consultant in charge of the ex-ante evaluation (referred to hereafter as 'the Consultant') collaborated with the Programme Design Team, the OP Competitiveness Managing Authority, the advisors on drafting the Programme, and staff of the (sectoral) General Secretariats of the Ministry of Development and Ministry of Tourism. Cooperation with all the above was constructive and took place in a context of consensus, despite the various different views, opinions and approaches to the content of the Programme.

The main points of the findings of the ex-ante evaluation of the first draft of the Operational Programme, the recommendations of the Consultant on improvements and the adjustments made to the original draft are set out below in summary form:

In Chapter 1 (Analysis of current situation) the following material was added:

- Concise general presentation of the country's key geographical, demographic and social data, so that the reader of the Programme will have a general idea of the overall environment. *Tables of structural indicators were added.*
- Presentation of existing needs in individual areas of the Programme, which create the requirements for the proposed strategy and interventions. *Partial incorporation of the needs text proposed by the Consultant.*
- References to issues of Culture and Health, since the OP will tackle specific needs in these sectors. References were included to cultural issues; a special provision for health was added to the indicative interventions. The Consultant believes that the dimension of research and entrepreneurship in the health sector is covered by the existing descriptions of Priority Axes 1 and 2.

- Presentation of the regional dimension of competitiveness in the country, with special references to urban, mountain, island and rural regions. *Partial incorporation of proposals with references to special spatial units.*
- Many individual additions/amendments to the text [Specific proposals were set out].

In Chapter 2 (The development strategy for the period 2007-2013) the following suggestions were made:

- Revision of Programme objectives, to introduce greater correlation with the requirements of Technical Guideline 1 and – mainly – with the NSRF. *Completed.*
- Deletion of specific objectives for each sector or their removal to Annex. *They are set out in Annex 2.*
- Review of cohesion of strategy on the basis of new objectives. *Completed.*
- Review of relevance of strategy, especially to the new NSRF. *Completed.*

In Chapter 3 (Development priorities) the following suggestions were made:

- Revision of objectives on level of Priority Axes. *Updating on the basis of proposal for abolition of Priority Axis on Human Resources and use of flexibility clause (10%).*
- Examination of possibility of limiting the number of interventions, given the limited availability of Programme resources. *Interventions were made at certain points.*
- Definition of indicators (output and result). *Completed.*

In Chapter 4 (Implementation Provisions) the following suggestions were made:

- Reference to general issues of Programme implementation and to more specific matters which need to be implemented particularly in the OP Competitiveness and Entrepreneurship, because of the nature, content and context of its implementation.

Finally, the overall result of the above cooperation is deemed positive and constructive, since the main observations and recommendations of the Consultant were included in the Programme. It should be clearly understood that:

- Some of the observations and recommendations of the Consultant were not accepted and not included in the Programme text, or not at least in the form in which they were proposed. Instead, as a result of the cooperation among all the officers mentioned above, new formulations were often prepared and included in the Programme, which contain, in improved form, the corresponding recommendations by the Consultant.
- No proposals were excluded from the text of the Programme over strong objections from the Consultant.

The ex-ante evaluation Consultant feels that the Programme, in the form in which it is submitted, is generally of high quality and meets the planning requirements:

- The analysis of the current situation is realistic and full.
- The development strategy and objectives are rational and respond to the requirements of the strategic planning in the Programme reference sectors, the

directions laid down by the Lisbon Strategy and the needs identified in the analysis of the current situation.

- The objectives of the Operational Programme might be described in general terms as quite ambitious, when seen from the perspective of the interventions and the resources available, but they represent the priorities of national planning and should make the OP Competitiveness and Entrepreneurship a driving force (together with the corresponding interventions in the ROPs) for the attainment of basic objectives of the NSRF.
- The geographical reference of the Programme (8 Objective 1 Regions) in relation to the national dimension of the strategic choices, creates the need for thorough coordination with the ROPs of the other 5 Regions during the programme period 2007 - 2013, in order to represent the implementation progress of the objectives pertaining to the whole country.
- The proposed system of monitoring indicators for the progress (outputs and results) of the Programme can give representative data and ensure representation of the true progress made, for a reasonable cost and effort.
- The general assessment of the adequacy of the planning is partially tempered by the large number of interventions and by certain weaknesses in the definition of Specific objectives referring to individual horizontal policies (consumer protection issues, support for extroversion, entrepreneurship support structures, new funding instruments). It is believed, however, that at this phase of planning the limited degree of definition contributes to the flexibility of the Operational Programme, which is a complex intervention, of sectoral character, for the attainment of national objectives.

PROCEDURE FOR COOPERATION AND DRAFTING OF EX-ANTE EVALUATION

The procedure followed in preparing the ex-ante evaluation (and the final version of the Operational Programme itself) was as follows:

The Consultant received the first draft of the Programme, as prepared by the Programme Design Team (in association with the drafting advisors). After examining and analyzing the text the Consultant defined what he regarded as its weaknesses and inconsistencies and formulated the appropriate observations and recommendations for submission to the Managing Authority of the OP Competitiveness. There followed numerous meetings, collaborations and exchanges of views between the Consultant and the officials of the Programme Design Team, the Special Management Service and the drafting advisors, in order to make the necessary additions and improvements to the Operational Programme and the text in which it is presented.

This procedure was then repeated with the subsequent amended versions of the Operational Programme.

A special procedure was followed for definition of the monitoring indicators of the Programme and the quantification of their objectives. The Consultant processed the data to be found in the Programme and recommended a series of indicators. These were discussed with the appropriate officials of the Special Management Service (for the individual areas of the Programme) and in the context of the Programme Design Team.

EVALUATION OF SOCIO-ECONOMIC ANALYSIS AND OF PREDETERMINED NEEDS

Given that the OP Competitiveness and Entrepreneurship is a complex – and critical, in terms of serving national objectives – sectoral intervention, called on to meet challenges over a broad range of thematic priorities of the NSRF, it is evident that there will be an objective difficulty in conducting a full, concise and thorough analysis of the current situation. An additional difficulty is created by the need for spatial definition of the analysis in the 8 Objective 1 Regions and the 5 transitional Regions, as well as the incorporation of the flexibility clause for human resources issues. The Consultant offers the observations and comments below, bearing in mind the technical and real difficulties presented by the drafting of strategic texts of this level of complexity.

Concerning the evaluation by sector of adequacy and documentation, the following observations are made:

- **Research and innovation**
 - It is necessary that an analysis be conducted of the innovative behaviour of businesses in all productive sectors being supported by the Operational Programme (processing, tourism, trade); the analysis should not be confined to innovation in relation to research. Since the analysis reveals that support is necessary for the sectoral component of industrial policy, it is necessary to identify the sectors which can intensify their innovative activities, and those which will contribute most to expanding the knowledge society. Given the lack of documentation at the present phase, it is proposed that an attempt be made to expand and deepen the analysis to cover the productive sectors through relevant research during the implementation preparation phase.
 - Annex 1 of the Draft Programme offers fuller details on the current situation, some of which would belong in the main text, given the importance of the 'knowledge economy' in the priorities of the OP Competitiveness, in order to document the need for rapid change in the business landscape in Greece and to increase activities involving production and transfer of new knowledge.
 - The generation of up-to-date statistical data in the sectors of innovation and research is an urgent priority, given the importance of the sectors in the development process.
- **Support for entrepreneurship, extroversion and upgrading of the country's productive fabric**
 - In general terms it is felt that the analysis of the current state of the Greek economy, contained in Section 1 of the Draft Programme, as well as the analysis presented in Annex 1, offer a comprehensive account of all the proposed fields of intervention covering support for entrepreneurship, extroversion and upgrading the country's productive fabric.
 - The analysis of extroversion in the Greek economy adequately covers the basic components in Greek export activity. It would be useful to have a sectoral and regional analysis of the export activity of Greek businesses, including the primary sector and agricultural industry, as well as an examination of trends towards

internationalization of Greek businesses, both on the sector and target market levels, in order to define with greater precision those markets and products which demonstrate the best prospects or require particular support, in view of the implementation of the new Development Act.

- The analysis is sufficiently full and comprehensive in its account of the country's level of productivity.
- The analysis of the current situation, including the relevant paragraphs of the Annex, covers to an adequate extent the basic characteristics of Greek businesses in the sectors of processing, tourism, trade and R&T. However, it would be useful if the analysis of entrepreneurship was not presented in a separate paragraph, but incorporated in the analysis of all the individual thematic fields making up the current situation (extroversion, productivity, innovation etc.). At the same time, it is felt that a concise presentation of the entrepreneurship of various population categories not distinguished for high levels of entrepreneurial activity (women, the disabled, etc.), in regions afflicted by de-industrialization and/or in new and innovative activities, above and beyond a simple reference to the pursued objectives of the Programme for the current programme period, would make the analysis fuller and more comprehensive. It would also be useful to refer to quantitative and qualitative data on employment in the various individual sectors and industries (in Annex 1).
- The section of the analysis dedicated to innovation and human resources offers a satisfactorily accurate and full picture of the Greek economy in terms of development of research and technology, representing the low degree of incorporation of RTD in the productive process and the failure of the Greek education system to adapt to contemporary business needs and requirements. It should be pointed out, however, that innovation is not defined entirely by these two parameters (research and technological development); other possibilities should be incorporated, such as the development of new forms of tourism, the design and manufacture of new products, the exploitation of new forms of employment, the use of innovative marketing tools, and so on.
- As for the endeavour to raise investment, the analysis of the current situation offers a satisfactory account of the diachronic development of national policies in support of business, and the ranking of Greece in relation to other member states. At the same time it successfully identifies the fundamental problems of Greek investment policy and formulates specific conclusions-objectives for the next programme period. However, the relevant paragraph is less well-grounded in its reference to private investment activity and the degree of inflow of foreign direct investment and outflow of Greek capital.
- Although the various sectors making up the Greek economy are analyzed more or less sufficiently, with special emphasis on the sectors and industries covered by the Programme (processing, tourism, trade), there is no information on other areas of economic activity (e.g. primary sector, services outside the areas of tourism and trade, etc.) which, although not comprising intervention areas for the Operational Programme, do nevertheless have a significant effect – positive or negative – on the country's level of competitiveness, and thus should be taken into consideration in the paragraph in question.
- More specifically in respect of the tourism sector, it is felt that the presentation offered in Annex 1 is sufficiently analytical and offers adequate support for the

analysis of the current situation, of which it forms part, and for the Programme strategy in the sector in question.

- Reference is made to the relatively limited analysis of the current state (number of businesses, share of GDP, contribution to employment, regional distribution, evolution over time, etc.) of special forms of tourism, with the exception of the mention of recent and anticipated developments in the area of infrastructures and services offered at tourist harbours (marinas, etc.). Given that the differentiation of the tourist product and lengthening of the tourist season are explicit objectives of Priority Axis 2 «Strengthening entrepreneurship and extroversion, upgrading the country's productive fabric» and proposed as indicative actions, it would be useful for such information to be presented. Since this omission appears to be due to the lack of relevant data, note should be made of the need for monitoring of these figures by the competent national/sectoral agencies.
 - The analysis includes a statement of the requirements set down in the new programme framework in respect of the Regions of the country, as well as a concise presentation of the region's characteristics. There is no in-depth analysis of the current situation in the Greek regions, which would allow specific conclusions to be drawn on the special needs and potential of the country's Regions.
- **Upgrading of human resources**
 - In respect of the upgrading of human resources, it is noted that by use of the flexibility clause this area functions in an accompanying role to the intervention axes. In this context it would be useful to offer information on human resources in specific areas of special interest of the Operational Programme.
 - **Improving the business environment, competition and consumer protection**
 - In respect of the upgrading and simplification of the regulatory framework in the relevant sub-section of the analysis there is a full if brief reference to the initiatives undertaken to improve the statutory framework and strengthen competitiveness.
 - As for Business Support Structures, it would be useful to include some reference to the results of implementation of corresponding actions in the OP Competitiveness 2000-2006, in which provision was made for a special category of intervention («transforming business support structures into mechanisms for generation of strategic information on market and innovation issues»).
 - In respect of funding instruments and, more specifically, venture capital and loans of business capital, the position of the country within the EU-15 is examined. Low levels of use of venture capital are commented on in the Section «Competitiveness and innovation and human resources». There are no references to other funding instruments or to the extent of their use, not any information on the manner and procedures of the use of other funding instruments during the 3rd CSF. It would also be useful to point out the particularly low use of venture capital in relation to other countries.
 - The reference to issues of modernization of business infrastructures is relatively limited.

- In the analysis of the current situation no reference can be found to the cultural sector, even though categories of intervention are included for this area. References were included in Annex 1 in later drafts.
- The same omission was found in the analysis of the current situation in relation to actions to highlight and promote for tourism ecologically sensitive regions, NATURA sites, etc. It is proposed that details from the NSRF analysis be included.
- In respect of strengthening consumer protection no description of the current situation was found.
- In respect of the highlighting-promotion of products and services, and the actions to promote products abroad, there is no mention of the policies followed and the interventions implemented; nor are any quantitative data given.
- **Integration of the country's energy system and strengthening of sustainability**
 - It would be useful if Chapter 1 of the Programme contained a concise analysis giving figures and rates of change in the energy sector and natural resource sector in Greece, as well as a more extensive account of investment endeavours in the country's energy sector.
 - Also useful would be an account of the links between the extroversion of the Greek economy and the energy sector, given that electrical power links with neighbouring countries and the Turkish-Greek-Italian natural gas pipeline indirectly affect the extroversion of the Greek economy.
 - In the section of chapter 1 of the Programme covering the competitiveness of the Greek economy, there is insufficient correlation drawn between the energy sector and the prosperity of the population. The importance needs to be stressed of strengthening of the Southern System, in order to avoid the problems of security and instability which compromise the reliable distribution of power to consumers.
 - In the text on the competitiveness of the Greek economy, it is noted that for implementation of the major interventions of national significance, such as the energy axes, the regional dimension is of secondary importance, since the Region is only an indirect beneficiary. Quite rightly, then, there is no in-depth analysis on the regional level. However, attention should be drawn to the special character of the island regions, and particularly the non-connected islands, whose energy supply is particularly critical and requires interventions of a local character.
- **SWOT Analysis**
 - The SWOT analysis was adjusted to match the classical form used in the NSRF. The content of the analysis is generally satisfactory and adequate; it is confirmed by the analysis of the socio-economic situation in the fields of implementation of the Programme, and satisfactorily incorporates its basic conclusions.
- **Needs**
 - It was deemed expedient and of particular value to offer a structured, relatively concise but comprehensive account of the existing problems and needs arising as a conclusion of the analysis of the current situation, as presented in the Draft Programme. A presentation of the existing problems and needs was prepared and included.

EVALUATION OF CONSISTENCY OF STRATEGY

• Affinity of strategic and general objectives

A high degree of affinity is to be seen between the strategic and general objectives of the Programme. There is a clear tendency towards a one-to-one correlation of Strategic and General Objectives. This tendency seems to be followed at other points of the Programme logic and is – to a large extent – the result of an attempt to simplify its structure and ensure compliance with the general instructions of the Ministry of Economy and Finance on drafting of the Operational Programmes for the period 2007-2013.

- The Strategic Objective of «Making Greece more attractive as a location for development of business activity, with respect for the environment and sustainability» demonstrates the greatest affinity with the totality of general objectives in the OP Competitiveness and Entrepreneurship.
- The Strategic Objective of «Accelerating the transition to the knowledge economy» demonstrates a high degree of affinity with General Objective 1, but seems overall to be supported more indirectly by the general objectives of the Programme. Strategic Objective 1 presents the lowest degree of affinity with the General Objectives, but is covered to a relatively high degree in absolute terms.

• Relevance of Strategy to Problems/Needs

In respect of scrutiny of relevance of strategy to problems/needs, we note the objective difficulty of full correspondence arising from the range of regions of interest of the Operational Programme and the complexity of the elements making up the analysis and definition of the strategy and objectives.

- The greatest relevance to the defined needs is shown by the 3 first General Objectives of the OP, i.e. «Strengthening research, technology and innovation in all sectors as a basic factor in the restructuring of the Greek economy and the transition to a knowledge economy», «Strengthening entrepreneurship and extroversion – Upgrading of the country's productive fabric – Increase in productive investment and inflows of foreign direct investment and general qualitative upgrading of products and services in all sectors and industries of the Greek economy»¹ and «Improving the statutory environment and support structures, infrastructures, mechanisms and tools for development of entrepreneurship – Strengthening competition – Consumer protection».
- General Objective 2 «Strengthening entrepreneurship and extroversion – Upgrading of the country's productive fabric – Increase in productive investment and inflows of foreign direct investment and general qualitative upgrading of products and services in all sectors and industries of the Greek economy» presents the greatest degree of relevance in relation to the others, in terms of its contribution to tackling the entire range of defined problems.
- General Objective 4, «Integration of the country's energy system and strengthening of sustainability» presents the most limited relevance compared with all the others, which is only to be expected given the targeted content of the objective.

¹ Titles of General Objectives are retained in the form in which they were included in the Draft Operational Programme submitted in March 2007

- The needs/problems «Incomplete energy network and limited implementation of 'green' business strategies» and «Difficulties in optimizing the combination of development contributions of sectors of the economy» are tackled to a comparatively lower extent by the general objectives.
- **Relevance of Specific and General Objectives of the Operational Programme**
 - A higher level of affinity can be seen between the General and Specific Objectives of the Programme. One exception is found in the case of the Specific Objectives for upgrading of human resources, which are, however, partially covered by the General Objectives, with targeted actions allocated to each Priority Axis.
 - General Objective 4 «Integration of country's energy system and strengthening of sustainability» demonstrates a relatively lower degree of relevance to the Specific objectives of the Operational Programme, whereas General Objective 2 «Strengthening entrepreneurship and extroversion – Upgrading of the country's productive fabric – Increase in productive investment and inflows of foreign direct investment and general qualitative upgrading of products and services in all sectors and industries of Greek economy» demonstrates the greatest relevance to the corresponding Specific objectives.
 - Relatively low affinity is demonstrated by the Specific Objectives «Expansion and enrichment of human research resources and strengthening of the entrepreneurial spirit and its geographical and inter-sectoral mobility» and «Rational management of natural resources» in comparison with all the other Specific Objectives.
 - A satisfactory number of Specific Objectives demonstrate a 50% level of contribution to the totality of the General Objectives; this is due to the clear trend for support of each General Objective by focused Specific objectives (maximization of unambiguous serving of objectives on higher level). This trend is deemed appropriate owing to the broad range of sectors and actions covered by the Programme.
- **Cohesion of Priority Axes and General Objectives of the Operational Programme**
 - In setting new targets for the Operational Programme the approach was adopted of a precise correlation of each General Objective to the Priority Axes, with the result that the OP is structured along 4 thematic axes (with the additional Technical Assistance axis), the same number as the General Objectives. There is thus no doubt about the cohesion of the Priority Axes with the General Objectives.
 - The «Strengthening of entrepreneurship and extroversion and upgrading of the country's productive fabric», which forms the object of Priority Axis 2, presents a high degree of cohesion with the actions of the other Priority Axes in the Programme.
 - The «Integration of the country's energy system and strengthening of sustainability» does not present a high degree of cohesion with the other Priority Axes of the Programme, owing to the nature of the objective and the content of Priority Axis 4. Specifically, the «Actions to integrate-modernize the country's power grid» and «Actions to strengthen special investment in the oil sector, in the context of the protection of the environment, with projects involving the relocation of oil storage tanks in the Attica region» present the lowest degree of relevance when compared with all other actions in the Priority Axes.
 - The actions «Knowledge-Excellence» and «Value» in Priority Axis 1– «Accelerating transition to the knowledge economy» present relatively low cohesion with the actions

of the other Priority Axes, given that these actions are particularly targeted to serve General Objective 1.

- **Complementarity / Synergy of Priority Axes of Operational Programme**

- The overall level of Complementarity/Synergy of the Programme Actions is highly satisfactory. The final result is even more favourable when we take the following points into account:
 - The «Complementary actions to enhance and upgrade skills and to increase the mobility of the labour force» are special cases of intervention defined exclusively for each Priority Axis. Their synergy with the corresponding Actions of other Priority Axes is in practical terms neutral (in practice, they should be excluded from calculations).
 - Priority Axis 4 is a quasi-special category of interventions which – as shown in the analysis of the preceding sections – presents a low level of affinity with the other Objectives of the Programme. The contribution of its Actions could be calculated using a weighting factor, but the Consultant refrained from doing so in order to avoid mistaken assumptions and to ensure uniformity in treatment of the Priority Axes.

The Actions of Priority Axes 1, 2 and 3 present equivalent indicators of Synergy/Complementarity with Priority Axis 2 «Strengthening entrepreneurship and extroversion – Upgrading of productive fabric of country – Increase in productive investment and inflows of foreign direct investment and general qualitative upgrading of products and services in all sectors and industries of the Greek economy» showing the higher values.

- The «Actions to support businesses in modernization and upgrading» and «Integrated Programmes for Development of Entrepreneurship» present a high degree of Complementarity/Synergy with other Actions in the Programme.
- The Actions of Priority Axis 4 «Integration of country's energy system and strengthening of sustainability» present the least Complementarity/Synergy with the other Actions in the OP. As stated above, this Axis is a special category of intervention, as was made clear by the analysis of relevance to the other objectives of the Programme.

- **Suitability of policy mix**

- In respect of the allocation of public spending to the intervention categories, for each code item of the Implementation Regulations, it appears that the best possible allocation was attempted on the basis of the availability of resources, the attempt to meet the basic strategic objectives and the need to continue policies and actions from the previous programme period.
- More significant in terms of commitments is the intervention Code 09 «Other measures to promote research, innovation and entrepreneurship» which attracts 26.03% of total Community Funding commitments. It should be noted that 64.29% of

total Community Contribution has been committed for «Research and Technological Development (R&TD), Innovation and Entrepreneurship».

- Significant categories from a funding perspective are Code 08 «Other investments in businesses» to which 15.21% has been committed, and Codes 35 and 36 involving «Natural gas» and «Natural gas (TEN –E)» to which 7.17% has been committed in all.
- 5.0%-8.0% of the community contribution has been committed for four other categories, specifically Code 05 «Advanced support services for businesses and groups of businesses» (7.64%), 42 «Renewable energy: hydroelectric, geothermal and other forms of energy» (6.18%), 07 «Investments in businesses associated directly with research and innovation (innovative technologies, setting up of new businesses by universities, existing R&TD centres and businesses, etc.)» (5.53%), and 39: «Renewable energy: wind power» (5.39%).
- The lowest funding weighting is shown by intervention Code 55 «Promotion of natural resources», which attracts just 0.19% of the community contribution.

• **Assessment of adequacy of resources**

Public spending for measures being implemented in the eight Pure Objective 1 Convergence Regions under the OP Competitiveness and Entrepreneurship 2007-2013 amounts to a total of 1721m €, while if we take into account estimated resources for the five transitional support regions, then for all thirteen Regions the estimated public spending amounts to approximately 3220m€. The total resources committed are lower than those committed under the OP Competitiveness 2000-2006 (total public spending 3,216.76m € at commencement of programme period) if we bear in mind that similar actions were implemented by the 13 ROPs with a total budget of over 600m € in public spending. The corresponding amount is not precisely known for the fourth programme period, but it will be lower (in accordance with the new Programme architecture and given that it will involve only 8 regions). Thus while a significant number of the actions for human resources are no longer covered by the Programme but by ESF Programmes (estimated budget of around 200m €) the total resources appear slightly reduced. It should be noted, however, that the above observation relates to the whole of the country, while for the eight Objective 1 Regions covered in funding terms by the OP Competitiveness and Entrepreneurship the situation in respect of adequacy of resources is clearly more positive.

- The bulk of resources under the Operational Programme will be spent on Priority Axis 2 «Strengthening entrepreneurship and extroversion – Upgrading the country's productive fabric – Increase in productive investment and inflows of foreign direct investment and general qualitative upgrading of products and services in all sectors and industries of the Greek economy», to which 31.84% of total public spending, or 548m Euro, has been committed. The second in terms of funding weighting is Priority Axis 4 «Integration of country's energy system and strengthening of sustainability», which commits 27.89% (480m €). This is followed by Axis 3 «Improvement of statutory environment and support structures, infrastructures, mechanisms and tools for development of entrepreneurship – Strengthening competition – Consumer protection» at 428m € and last comes Priority Axis 1 «Strengthening research, technology and innovation in all sectors as a basic factor in the restructuring of the Greek economy and the transition to the knowledge economy» which commits 231m €.

- It should be noted however that the resources committed to the sector of research, technology and innovation (Priority Axis 1), when compared with those under the 3rd CSF, show a significant increase (almost a doubling) over all thirteen Regions. The additional resources are all directed to the five transitional support Regions, a fact deemed reasonable given that it is in these areas that the bulk of the country's RTD activity is concentrated.
 - In respect of the allocation of public spending on the Priority Axes, and intervention categories, by the Codes used in the Implementation Regulation, it is evident that the best possible allocation has been attempted on the basis of availability of resources, the attempt to meet the basic strategic objectives and the need to continue policies and actions from the previous programme period.
 - The resources committed are generally sufficient, given that the strategic choices and priorities they serve are also served and supported by other Operational Programmes (such as the Regional Operational Programmes, the OP Digital Convergence etc.) as well as national policies (such as the Public-Private Partnerships).
 - The resources for the energy sector (Priority Axis 4) are considered in principle adequate, taking into account that they are destined for interventions which will cover critical and/or significant actions for attainment of the objective of integration of the energy system and strengthening of sustainability. The final degree of adequacy will depend on the funding policy implemented at the investment level and may prove eventually to be anything from adequate to very adequate.
 - Despite the fact that Priority Axis 2 has the greatest funding weighting of all Axes in the Programme, its resources (across all thirteen regions) are significantly down on those available in the preceding programme period, thereby reflecting the strategic policy which strengthens the sectors of energy and research and innovation. It is estimated that these resources will adequately meet in funding terms the programmed interventions and will support attainment of the targets set (qualitative and quantitative) given that the new statutory framework (implementation of the Development Act) provides for reduced levels of co-funding and greater private sector participation.
 - Priority Axis 3 presents a significant increase in committed public resources when compared with the current programme period, reflecting the priority and strategic direction for the shaping of a favourable business environment. The degree to which the resources of Priority Axis 3 respond to the needs of the programmed interventions will depend on the relevant statutory framework.
- **Risk Analysis**
 - The sheer number of actions in the Programme makes it vulnerable to one of the most frequent charges made by evaluators, fragmentation of funds over many small actions, but is nevertheless consistent with the more general objectives of the Operational Programme, the NSRF and the National Reform Programme, and also reflects the observed need for multiple interventions in order to ensure the transition to a knowledge economy. Critical factors in attainment of the objectives are the degree of readiness of the Greek administration to respond to the complexity of the system, the ability to focus on particular technologies and sectors of production and the ensuring of adequate 'demand' for the implementation of the actions. It would thus be useful to select the actions anticipated to have the most direct result for priority in execution of the Programme. Certain mergers among actions, which would limit complexity and make them more intelligible to beneficiaries, are also feasible.

- We note the risks arising from the limited scale of the national system of innovation. Taking as criterion the direct support they offer for innovation, the actions under «value» and «knowledge» which are linked with businesses and the implementation of public policies are of a more urgent nature and must take chronological precedence in implementation to give a clear sense of the Programme policy. The basic risk in implementation is associated with the fact that the Programme includes large, complex actions and seeks the involvement of many target groups. Greater care over coordination is thus required. Some of these actions might be merged in order to facilitate 'market' understanding of the Programme.
 - It also appears necessary to monitor systematically, during progress on implementation of the Programme, the degree to which the Programme itself, and the other Operational Programmes containing measures for research (OP Education, ROP Attica and Central Macedonia, etc.) will contribute to the quantitative objective of Lisbon and the NRP for increase in Gross Domestic Spending on Technology and Research to 1.5% of GDP by 2010, or even 2013, with business involvement accounting for 40% of Gross Domestic Spending on Technology and Research. Achieving this objective for the whole of Greece will require more intensive involvement in the endeavour by the most technologically advanced Regions, such as Attica and C. Macedonia, which will need to exceed their regional percentages by more than 1.5% by the end of the programme period. The difficulty also involves the effective implementation and coordination of the anticipated measures and actions by the competent services of the final beneficiaries, and the readiness and reliability of the system for monitoring and periodical adjustment of the Programme during implementation, bearing in mind that the transitional regions of Attica and C. Macedonia will be responsible for absorbing the greater part of overall public spending on research and innovation.
 - There are also clear risks arising from the low level of statutory maturity of the interventions to develop new financing instruments.
 - The interventions for business receptors are linked with the completion and enactment of the National Physical Planning and Special Plans for Tourism, RES and Processing.
 - The strategy for development of Business Support Structures requires concentration of effort on generating the real added value of the interventions.
 - The new Development Act has a positive effect on clarifying the direction and special arrangements of state aid for businesses (including rural industry interventions).
 - Significant effort is required to coordinate the OP Competitiveness and Entrepreneurship and the OPs for the transitional support regions in all areas of research – competitiveness – extroversion - entrepreneurship.
 - Given the character of the Programme as a driving force for attainment of the basic objectives of the NSRF, it will be necessary to clarify without delay the critical issues of implementation of the Operational Programme.
- **Alternative Implementation Mechanisms**
 - The European Investment Fund and more generally the opportunities offered by the European Investment Bank and the new financing instrument JEREMIE (Joint

European Resources for Micro to Medium Enterprises) provide additional opportunities which have not yet been exploited.

- The new statutory framework for Public-Private Partnerships is still in the early stages of implementation and is, despite some reservations, felt to be already functioning positively in terms of attracting private capital into sectors which traditionally met their needs (mainly for infrastructure) through the Public Investment Programme.
- The Model Innovative Development Plans (Global Grants) are also, judging from the invitation to submit proposals issued by the Ministry of Economy and Finance, potentially a significant means of implementing innovative interventions, mainly those with a spatial dimension but also those with a thematic focus on sectors which can support the promotion of new forms of entrepreneurship.

EXAMINATION OF COHERENCE OF STRATEGY WITH NATIONAL POLICIES AND COMMUNITY STRATEGIC GUIDELINES

• Relevance to Community Strategic Guidelines

- The significance of the Operational Programme Competitiveness-Entrepreneurship in the context of the NSRF is emphasized by its contribution to serving the Community Strategic Guidelines for Cohesion 2007-2013, since the Programme contributes directly to 6 and indirectly to 2 of the Guidelines; in other words, together with the ROPs, it shoulders the major burden of responsibility for attainment of the Cohesion Policy objectives.
- The Operational Programme also makes a particularly important contribution to attainment of general consistency of the priorities of the NSRF with the objectives of the National Reform Programme and the European priorities for Development and Employment. Specifically, attention should be drawn to the importance of the Operational Programme for the 2nd Thematic Priority (Knowledge Society and Innovation), its serving, in common with the 5 ROPs, of the 1st Thematic Priority – Chap. 3 of the NRP (Investment in the productive sector of the economy) and, in common with the OP Education and Lifelong Learning, its promotion of the Knowledge Society (Chap. 4 of the NRP).
- On the level of objectives the Operational Programme makes a positive contribution to «increasing employment» while contributing only indirectly and in a limited fashion to «restoring fiscal balance and ensuring long-term viability of public finances».
- Finally, we should note the vital contribution of the Operational Programme Competitiveness and Entrepreneurship to linking the NSRF with the Integrated Guidelines for Development, as well as its indirect but important contribution to the Employment policy guidelines.

• Relevance to the National Reform Programme

- The existence of a high degree of relevance is confirmed by the investigation matrix of cohesion of the Programme with the NRP. Very high levels of relevance are seen in relation to the NRP priorities «Increasing productivity by tackling the structural problems in the working of markets, investment in human resources and promotion of the Knowledge Society» and «Improving the business environment, strengthening competition, opening up markets, increasing extroversion and exploiting the country's geopolitical situation to attract investment activity, with prospects for expansion into

the broader region of SE Europe», while only indirect and limited relevance is seen in relation to the priority «Restoring fiscal balance and ensuring the long-term viability of public finances».

- **Relevance to the National Strategic Reference Framework**

- Pursuant to the NSRF, the Programme is called on to serve, mainly, four out of the five Thematic Priorities, i.e.:
 - Thematic Priority 1: Investment in productive sector of the economy,
 - Thematic Priority 2: Knowledge society and innovation,
 - Thematic Priority 4: Statutory Environment, and
 - Thematic Priority 5: Making Greece and the regions attractive locations to invest, work and live in.
- Thematic Priority 3, on employment and social cohesion, is not covered, insofar as the Programme interventions are focused on specific target groups and therefore mainly involve General Objective 8 of the Priority in question.

EVALUATION OF THE ANTICIPATED RESULTS AND IMPACT

- **The system of indicators of the Operational Programme**

- The development of the Framework and the selection of the individual Indicators were made on the basis of the Programme Intervention Logic (Strategy) and governed by the specifications of the basic methodological tools of the Community (Project Cycle Management, Logical Framework Approach, M.E.A.N.S.) as well as other supplementary guidelines and documents ("The Guide" – Tavistock Institute, Circulars and other Methodological Working Documents).
- In accordance with the spirit of the relevant Regulations and circulars governing the drawing up of Operational Programmes, the Indicator Framework of the OP includes representative Output and Result Indicators, for the main actions in the Priority Axes, in full relevance to the requirements of the National Strategic Reference Framework (NSRF) for the new Programme Period (2007-2013).
- The Operational Programme Competitiveness and Entrepreneurship is a complex and critical – in terms of serving national objectives – sectoral intervention. In order to meet the challenges over the whole range of thematic priorities of the NSRF, the Programme adopts a comprehensive package of strategies and organizes its large number of varied, necessary interventions under five Priority Axes: four which correspond to General Objectives of the Programme and one involving support for its implementation. Its interventions seek a successful response to the challenges of the present day in respect of Competitiveness and Entrepreneurship, over a wide range of sectors (Processing-Services, Research and Technology, Energy, Tourism, Culture, Trade and Consumer Protection), in order to attain all the programme objectives (strategic, general and specific) and to meet effectively the existing needs and priorities.
- Management of such a broad (covering many sectors and many thematic units) and complex strategic intervention is expected to require the use of many complex and/or detailed Monitoring Indicators, especially on the level of outputs. However, expansion

of the required Indicator Framework is often counter-productive: the management experience of previous programme periods (2nd and 3rd CSF) has shown that the use of many indicators, albeit methodologically justified, does not really serve the objective of effective monitoring of the interventions, while at the same time it entails cost and effort disproportionate to the result and often simply not available. By contrast, the use of a flexible, simple Framework, relatively limited in its number of indicators, facilitates the exchange of reliable data on progress among the agencies involved in the Programme (beneficiaries, contractors, final beneficiaries, Special Management Service, Ministry of Development, other Ministries, etc.) without seriously compromising the value of the information. In methodological terms this is particularly true in the case of Result Indicators (and Impact Indicators, if and where these are required).

- The OP Indicator Framework in the shape it has assumed following a series of consultations between the Programme Design Team, the Programme drafting advisors and the Ex-Ante Evaluation Consultant, follows to a great extent the rationale described above. Out of a large number of possible Indicators for the quantification of Output and assessment of Results of the interventions, a small and representative nucleus was chosen which can express and represent to a large extent the progress made by the most significant of the Programme interventions.
- The selection of the Indicator Framework for the OP was made on the basis of specific criteria, which reflect the importance and criticality of each Indicator. Specifically, in general terms, the following criteria were used to decide on the inclusion or exclusion of each Indicator from the Framework:

Indicator Selection Criteria

- ◆ The Indicator is proposed by the NSRF.
- ◆ The Indicator refers to an intervention with a significant financial weighting.
- ◆ The Indicator refers to an intervention of critical importance to attainment of the OP objectives
- ◆ The Indicator refers to an intervention of specific interest.
- Where deemed useful, either because of the absence of a relevant proposed NSRF indicator, or owing to the existence of significant (in accordance with the above criteria) interventions, the Framework was enhanced by addition of other 'quantitative' Indicators, i.e. Indicators which are able to quantify the relevant interventions.
- The limited and selective use of baseline values (with the consent of the Evaluation Consultant) mainly involves those indicators which have characteristics of national aggregation, of a feasible approach, and render with clarity a picture of the intervention sector.
- At any event, all the selected Indicators meet the suitability criteria (S.M.A.R.T) laid down in the relevant Community Methodologies (Logical Framework Analysis) and in the Circulars of the Ministry of Economy and Finance:
 - They are specific and clearly formulated.
 - They are objectively measurable and have numerical Baseline Values and Target Values in accordance with the approach mentioned above.

- They are susceptible (during implementation of the Programme) of quantification within logical cost and time frames (e.g. complex studies are not required in order to define their values).
 - They are representative and relevant to the items to be measured (i.e. the items set for the main objectives and priorities).
 - They involve interventions which are defined within specific time frames and refer to results of the Programme Period 2007-2013.
 - Their target values can be achieved with the economic resources made available under the Operational Programme.
- The Indicators were defined on the level of OP Priority Axis and involve the whole of the Programme. For each Indicator the intervention to be measured was defined, as were the measurement units, the baseline value, the reliability and adequacy of the sources providing the measurement/verification data, and, where necessary, the average unit cost for the indicator calculation.
 - Finally, the OP Indicators, as formulated, are in summary form (as far as possible) and in certain cases involve more than one intervention category.

EXAMINATION OF PROPOSED IMPLEMENTATION SYSTEMS/PROCEDURES

- The Draft Operational Programme Competitiveness and Entrepreneurship contains in the chapter on Implementation Provisions (Chapter 4) the draft of the (joint) Implementation Provisions drawn up by the Ministry of Economy and Finance, adjusted to take account of the needs and special issues of the Programme.
- This text covers the (general) requirements of the programme documents of the EU concerning Implementation Provisions. Some issues remain to be clarified, since they are expected to be the subject of provisions in the new legislation on implementation of Operational Programmes for the period 2007-2013 (to replace the existing Law 2860/99). Such issues include the presentation of the Management and Audit System for co-funded interventions in the new Operational Programmes, the procedures for selecting projects, etc.
- To ensure complete readiness for commencement of action implementation in the Operational Programme it will be necessary to ensure timely issuing of the required Ministerial Decisions and circulars which will define individual issues of establishment and operation of bodies, management, inclusion of operations and monitoring of implementation progress.
- The evaluation regards the setting up of the National Coordination Authority as a particularly positive step and believes it will strengthen and ensure rational planning of measures and resources, as well as compliance with the Community Regulatory Framework. It also regards positively the anticipated procedure for coordination of actions in the Operational Programmes and NSRF, and particularly the setting up of a committee for co-funded actions, state aid, financial instruments and EIB loans, as well as the establishment (under the new statutory framework for research and technology) of a National Organization for Research, Inter-Ministerial Committee for Research and Technology and National Research Council. It notes, however, the need for optimal coordination in the issuing of the required regulatory instruments, in order that the necessary regulations can be completed in good time.

- In the fourth programme period greater emphasis is laid, quite rightly, on the proper functioning of the management and control systems, as well as the procedure for auditing those systems themselves and a suitable number of actions, while provision is also made for more independence of the Operational Programmes in the current management.
- In respect of procedures for inclusion-evaluation-monitoring of operations, the need is noted to expand the use of Comparative Evaluation, in combination with simplification of the procedure for submitting proposals, and reduction in the volume of documentation being moved, perhaps by introducing the use of electronic signatures for the users of the new MIS.
- The evaluation was positive in its view of the system for verifying the managerial capacity of the Final Beneficiaries by a) creation of new Implementation Agencies in the form of sociétés anonymes or Special Implementation Services, b) the capitalisation on expertise from agencies and organizations in the broader public sector by less capable Implementation Agencies, and c) technical support for adaptation of existing Implementation Agencies.

SPECIAL ISSUES

- **The contribution of ex-ante evaluation to assessment of the spatial dimension of the Operational Programmes**

The Operational Programme contains a discrete sub-section involving the regional dimension of competitiveness, with special reference to each individual Region or group of Regions. The reader is reminded that the Operational Programme covers in funding terms only the 8 Objective 1 Regions. The policies for competitiveness and entrepreneurship are, mainly, sectoral and horizontal, and the competitive character of the interventions makes it difficult to conduct a programme assessment of their spatial distribution:

- It is believed that the completion and enactment of the National Physical Planning Scheme, and the Specific Plans related to the themes of the Operational Programme, on tourism, RES and processing, will make a decisive contribution to the solving of critical problems of the siting of business activities and will accelerate the pace at which special categories of investment are implemented.
- The discrete sub-section incorporated in the Operational Programme and involving the spatial dimension of the interventions should be defined more precisely at a later date after consultation with the competent ministries (Min. of Development, Min. of Environment, Planning and Public Works).
- It would also be useful if the sub-section on the regional dimension of competitiveness, contained in the Operational Programme, had more detailed documentation of the distribution of resources to specific categories of intervention in the Regions.

- **Maximization of Community Added Value**

Community Added Value (CAV) is a basic requirement of European Regional Policy and more particularly of interventions promoting innovation, networking of business activities,

undertaking of business risk, dissemination of accumulated knowledge and deepening of the partnership relationship.

Differentiation of the programming procedure, in combination with changes on the funding level, is designed to strengthen those policies which provide Added Value, focusing on Cohesion (Integrated Multi-Sectoral Development), Stability (ongoing long-term planning) and Responsibility (systematic monitoring and evaluation).

The Operational Programme Competitiveness and Entrepreneurship shoulders – because of the basic strategic objectives it is called on to serve - a significant part of the responsibility for attainment of the objectives of the NSRF, especially those contributing to maximization of Community Added Value.

From this perspective the contribution of the Programme would be clearer if there were available supporting studies for the previous programme period examining the situation in the basic sectors as it would have developed without the contribution of the OP Competitiveness. There would be, for example, interesting answers to questions of the type: how many more start-ups of new businesses occurred or how many trial implementations of new measures or approaches, which would not have taken place without support from the Programme?

Despite the fact that the answers to such questions seem to be positive, nevertheless they cannot be quantified without interventions in the OP monitoring system, in combination with the overall movement and development of the sectors and regions of intervention.

The Operational Programme is oriented to meeting basic criteria related to CAV, particularly:

- The need to create a critical mass of human and financial resources
- A real contribution to implementing the cohesion policy through synergies and complementarity of the Operational Programme with other interventions (sectoral Operational Programmes for convergence regions) and
- Tackling problems arising on the community level (strengthening research, energy, etc.).

UTILIZING THE FINDINGS OF THE EX-ANTE EVALUATION

Utilizing the findings of the ex-ante evaluation in the planning and final definition of the Operational Programme is not merely a matter of direct adjustments of the text, as included in this section, since many of the relevant observations, and mainly those referring to possible risks, will be taken into account and utilized in the stage of more narrow definition and preparation of the interventions. It should also be noted that at the final stage of Programme submission (July 2007) and subsequent to negotiation with the European Commission, the text of the analysis of the current situation was enriched in sectors touched on in the previous section, such as the innovative behaviour of businesses, the analysis of their extroversion, consumer protection, the energy sector, etc.

In respect of some of the issues touched upon in the 'risk analysis' paragraph, the following points should be noted:

- The large number of actions

While on the one hand the large number of actions does represent a risk, on the other it is an inescapable necessity for the Programme, arising from the large number of policy sectors it covers, in combination with their critical role in attainment of significant objectives, such as the Lisbon Strategy, the attainment of the Kyoto targets, etc., and the need to continue basic policies. At the implementation phase, and specifically at inclusion of operations, bearing in mind the framework for Management, Control and Implementation, care will be taken to ensure as far as possible that resources are not fragmented.

Moreover, special emphasis is laid on the statutory preparation of actions and the timely promotion of support studies.

- Major interventions in R&T

Amendments are to be made to the legal framework, where necessary, and preparatory studies will be conducted for the 'major' and innovative interventions. It should be noted that in the current programme period there is relevant valuable experience from the action of regional poles of innovation and the Thessaloniki Innovation Zone.

Particular care will be taken by the Special Management Service of the Operational Programme, with the creation of a special 'Task Force' to promote projects with a pronounced innovative character which meet the conditions for productive exploitation, with the emphasis on mobilization and coordination of the agencies involved to ensure the necessary statutory and technical maturity of implementation.

- Coordination on issues of Research and Technology with the five transitional support regions.

Coordination with the five regions will be ensured through ongoing cooperation with the General Secretariat for Research and Technology, which is the competent agency for framing and implementing policy in the areas of research and technology, and for coordination of the corresponding interventions in the context of the NSRF, as well as the competent ROP Managing Authorities in the planning and implementation of the Competitiveness and Entrepreneurship actions.

- Funding instruments

Relevant studies will be used for maturing of funding instruments and wherever else necessary.

2.6 THE FINDINGS OF THE STRATEGIC ENVIRONMENTAL ASSESSMENT

NON-TECHNICAL SUMMARY OF THE STRATEGIC ENVIRONMENTAL IMPACT STUDY

General comments

The OP Competitiveness and Entrepreneurship gives specific definition to the strategy for strengthening the competitiveness and extrovert entrepreneurship of the Greek economy in the context of the more general national development strategy for the new period 2007-2013.

It is anticipated that the strategy adopted and the modes of intervention defined in the Programme will have a positive impact on competitiveness, extroversion and entrepreneurship in Greece and will ensure positive development results for the entire Greek economy.

The strategy covers the areas of processing, services, trade, consumer protection, research-technology, energy, tourism and culture – thereby covering the areas of competence of the Ministry of Development, Ministry of Tourism and Ministry of Culture.

Area of Study

The Operational Programme Competitiveness and Entrepreneurship covers – on the strategic and funding level – a geographical area corresponding to the eight pure Objective 1 «Convergence» Regions namely E. Macedonia & Thrace, Ionian Islands, Epirus, Thessaly, W. Greece, Peloponnese, N. Aegean and Crete. The broader region of study is defined as the entire country.

The present Strategic Environmental Impact Study takes the whole country as its area of study, which involves the necessary expansion of the geographical field of implementation of the Programme (eight Pure Objective 1 «Convergence» Regions), in which it is expected that there may be environmental effects, whether direct or indirect, from implementation of the planned objectives and actions of the Programme.

Competitiveness in Greece

The level of competitiveness of the Greek economy remains comparatively low, a situation which undermines attempts to ensure self-generating development. The rate of growth for 2005 was 3.7%, while for 2006 and 2007 it is expected to rise to 3.8%, reaching 4% in 2008. In the first half of 2006 the growth rate rose to 4.1%, with favourable indications and prospects for the second half of the year, a fact which indicates that the growth of the economy could exceed the forecasts of the Stability and Growth Programme.

Strategic Environmental Assessment (SEA) procedure - Directive

The Strategic Environmental Assessment (SEA) is a procedure for evaluating the environmental impact of certain projects and programmes, introduced to Greece by Joint Ministerial Decision 107017/28.8.2006 (Gov. Gazette 1225/B/5-9-2006), one of the measures aligning Greek legislation with Directive 2001/42/EC. The purpose of Directive 2001/42/EC is to promote Viable or Sustainable Development, with high levels of environmental protection and incorporating environmental issues into preparation and legislation for projects and programmes. The preparation of the Strategic Environmental Impact Study (SEIS) forms the core of the SEA procedure.

Other related programmes

The Operational Programme Competitiveness and Entrepreneurship is directly correlated with the National Reform Programme, the National Strategic Reference Framework and the Revised Lisbon Agenda, as well as the following programmes: Operational Programme Environment and Sustainable Development, Operational Programme Human Resources, Operational Programme Improved Accessibility, National Plan for Solid Waste, National Programme to Reduce Emission of Greenhouse Gases, National Physical Planning, National Strategy for Sustainable Growth, Regional Operational Programmes and Regional Land Use Plans.

Environmental Situation

Air

On the national level emissions of the main pollutants tend to follow the rate of increase in GDP. However, in the case of nitrogen oxides (NO_x) and sulphur dioxide (SO₂), there has been a significant trend towards divergence since 1998. The European Union's new Directive 2001/81/EC frames its basic strategy and objectives for reducing emissions over the period 2000-2003. This strategy lays down objectives for reducing emissions by 2030 in comparison with the 2000 levels as follows: NO_x by 47%, NMVOCs by 45%, SO₂ by 67%, NH₃ by 6%, PM₁₀ and PM_{2,5} by 38% and 46% respectively.

Climate

Greece is committed to limiting the increase in emissions of greenhouse gases over the period 2008 – 2012 to 25% of levels in the relevant baseline year. Total greenhouse gas emissions in Greece in 2002 increased by 21.1% over the baseline levels.

Noise

According to Ministry of the Environment figures almost all urban regions of the country suffer from serious degradation of the acoustic environment. Of course the problem is worse in the major cities like Athens (where 40% of the country's population and 50% of its industrial and manufacturing activity are to be found, as well as 55 % of all vehicles and 70% of services), Thessaloniki, etc.

Water Environment

The total water capacity of the country is estimated at about 57,100 hm³/year. Consumption of water is calculated at 8,243 hm³/year, of which 83% is used for irrigation, 1% for livestock farming, 13% for domestic water supply and 3% for industry and energy. In the eight pure convergence regions demand for water amounts to 4,753.2 hm³/year of which 4,377 hm³/year is used for irrigation, 61.3 hm³/year for livestock farming, 276.9 hm³/year for domestic water supply and 31 hm³/year for industry and energy. In general terms the quality of Greece's water resources is deemed acceptable.

Soil

The main problem in soil resources in Greece takes the form of desertification (including erosion and salination) which results in a reduction in productivity and degradation of quantity and quality of water resources.

Biodiversity

Greece has nominated 239 areas as 'Sites of Community Importance' under Directive 92/43/EEC and has declared 151 Special Protection Zones for birds, pursuant to Directive 79/409/EEC.

10 National Forests and 6 National Parks have also been declared, while 19 sites have been designated as forests of exceptional beauty, 51 areas have been listed as protected natural monuments, 7 controlled hunting areas have been named, and 21 state-controlled game breeding areas and 10 wetlands of international importance have been established.

Of the total surface area of 78,746 km² of the pure convergence regions, 21,080.5 km² comprise areas proposed for inclusion in the Natura 2000 network, i.e. some 27% of the total area of these regions.

Population

At the beginning of 2004 the population of Greece amounted to 11,040,650. 37% of the population live in the two main cities, while 60% live in cities of more than 10,000 inhabitants. The age distribution is showing a shift towards the older groups, with the ageing indicator rising sharply over the period 1992-2003. Life expectancy at birth increased for men to 76.6 years in 2004 and for women to 81.5 in the same period.

Socio-economic Environment

In the second quarter of 2004 the number of those in part-time employment in the pure convergence regions was 81,294, with 1,482,472 in full-time employment. The total labour force amounted to 1,563,766. The percentage of those in part-time employment in the pure convergence regions was 5.2%.

The level of employment in Greece over the period 1994-2005 rose from 54.2% to 60.1%. The indicator of overall entrepreneurship places Greece just above the EU average (5.8% compared with 5.5%). The overall indicator of processing output has been largely unchanged since 2000, following several years of increase (1995-2000). In national terms there has been a trend towards de-industrialization, with a fall in factory numbers and employment levels.

Tourism is the fastest-growing economic sector, contributing 17% to total GDP.

Although general levels of health are good in Greece, they are not improving at the same rate as in other Mediterranean countries, but still lag behind in prevention, organization of public health and primary care, as well as staffing with suitable personnel.

Although Greece is endowed with a wealth of natural resources, it still produces little energy from RES, specifically 9.6% for 2003 (compared with an EU-25 average of 12.7%). Directive 2001/77/EC envisages an indicative target of RES use, including major hydroelectric projects, of 20.1% of gross energy consumption by 2010, an objective consistent with Greece's Kyoto obligations.

Cultural Heritage

The country's cultural heritage consists of the cultural goods located within its borders, including its territorial waters and other marine areas where Greece has jurisdiction under international law. The cultural heritage also includes intangible cultural assets and is protected under Law 3028/2002.

Alternatives and Evaluation

In drawing up the programme the zero solution was examined, as well as three additional alternative solutions, as follows:

The first solution focuses on rapid growth in pursuit of immediate results for the programme.

The second solution also sets rapid growth as its main objective, but investing only 55% of resources in strengthening entrepreneurship in the classic sectors of the economy.

The third solution seeks a more balanced growth over time. About 15% of resources are channelled into actions supporting transition to the knowledge economy, more than 25% go to the energy sector, while improvement of the business environment and upgrading of human resources attract more than 20%. Finally, strengthening entrepreneurship absorbs about 30% of resources, with the emphasis on innovative actions in high added value areas.

The third of these options is to be preferred in environmental terms. Selection of this solution does not rest only on environmental criteria, but also on the fact that it seeks a balanced and viable growth over time, emphasizing not only direct productive investments and energy, but also the structural changes which will make the economy more competitive.

Operational Programme Competitiveness and Entrepreneurship

The productive, entrepreneurial, extrovert and innovative orientation of the national development strategy sets the following development priorities:

Strengthening of Research, Technology and Innovation in all sectors as a basic factor in the restructuring of the Greek economy and the transition to the knowledge economy.

Strengthening entrepreneurship and extroversion – Upgrading the country's productive fabric – Increasing productive investment and inflows of Foreign Direct Investment and general qualitative upgrading of products and services in all sectors and industries of the Greek economy covered by the Programme

Improving the statutory environment and support structures, infrastructures, mechanisms and tools for the development of entrepreneurship – strengthening competition – consumer protection

Integration of country's energy system and strengthening of sustainability

Environmental Impact

The anticipated impact on the environment in respect of the Priority Axes (PA) of the OP Competitiveness and Entrepreneurship is estimated as follows:

AP1 mostly neutral to positive, mainly indirect, appearing in the medium to long term and of permanent character

AP2 neutral, negative or positive and without the taking of measures may prove particularly negative; indirect and direct, appearing in the short to medium term and of mixed character in terms of duration

AP3 mostly neutral to positive, direct and indirect, appearing in the medium to long term and of permanent character

AP4 neutral, negative or positive, some impact may prove particularly negative if measures are not taken, mainly direct, appearing in the short term and of mixed character in terms of duration

The effects of the OP Competitiveness and Entrepreneurship in the main environmental reference areas, and the measures proposed to counter them, are presented in the table below.

Environmental/Social sector	The programme will:	Degree	Comments
Biodiversity	<p>Protect habitats and species?</p> <p>Promote biodiversity as a national resource?</p>	-	<p>The impact of the OP is expected to be negative, owing to increased production and building activity, especially activities which may affect natural sites and species of flora and fauna.</p> <p>It is possible that through the OP actions may be undertaken to improve the situation by construction of 'green' infrastructures, while actions to promote the natural environment have been provided for in the Tourism sector.</p> <p>Full impact studies need to be conducted and structural measures taken in all cases where there is a chance of impact on natural sites and species.</p> <p>There can only be improvement if the prospect is accepted of development with parallel taking of measures to protect biodiversity. If the usual practices are continued, the impact will remain negative.</p>
Population	Increase the population?	0	No particular impact is expected on overall population, although there may be local effects from movement of jobs and workers
Human Health	<p>Improve basic characteristics of health by:</p> <p>Reducing poverty and unemployment?</p> <p>Reducing</p>	+	<p>Higher incomes will allow more people to access satisfactory health services, while increased participation in economic activity by disadvantaged groups and individuals will also allow them access to health services.</p> <p>A positive impact will be had by</p>

Environmental/Social sector	The programme will:	Degree	Comments
	accidents?		<p>improved working conditions, reduced accidents and improved conditions of public health. Healthy life and leisure/work balance programmes will be positive steps towards improving conditions of health</p> <p>Small deterioration in conditions of health may result from increased air pollutants.</p>
Flora and fauna	-	-	See biodiversity
Soil	<p>Reduce loss or degradation of soil?</p> <p>Reduce generation of solid waste?</p>	-	<p>The OP is not expected to have a serious impact on degradation of soil quality, which is mainly due to intensive farming and certain productive and mining activities.</p> <p>Soil is expected to be lost, however, from the construction of workplaces and infrastructures, as well as the disposal of increased amounts of solid waste</p>
Water	<p>Reduce generation of liquid waste?</p> <p>Protect water resources?</p>	-	Increased production will result in increased pressure on water resources, in terms of quantity and quality. Even with better management, saving and recycling, it will be difficult to reverse current trends, at least during the implementation period of the OP.
Air	<p>Reduce emissions?</p> <p>Reduce polluting sectors and replace them with other, less polluting, activities?</p>	+/-	<p>The impact is expected to be mixed. Increased production and mobility, with parallel growth in transport volumes, will tend to increase air pollution, while positive results are expected from increased use of renewables and natural gas.</p> <p>It is difficult to estimate the precise effect of the OP, since no highly</p>

Environmental/Social sector	The programme will:	Degree	Comments
			polluting facilities are expected to be built, while existing facilities may be reduced.
Climate factors	<p>Improve energy-saving levels?</p> <p>Reduce energy consumed for each unit of GDP?</p> <p>Promote use of RES?</p> <p>Reduce greenhouse gas emissions?</p>	+/-	<p>Emissions of greenhouse gases are expected to rise, despite increased use of renewables, owing to production activities and increase in transport volumes.</p> <p>Only an increased use of RES beyond official targets, successful attempts to save energy and a change in transport philosophy and the way private individuals travel can reverse current trends.</p>
Assets	Increase the value of assets	+/?	It is evident that increased disposable income will create further increase in assets through greater investment and surplus value. It is also likely that certain forms of production will have an adverse impact on isolated assets which, at the moment, cannot be defined in terms of space and time. Protection of these assets will be a matter for adequate policing and judicial efforts.
Cultural heritage	<p>Achieve protection of buildings, monuments and sites of cultural interest?</p> <p>Protect local diversity and natural ways of life?</p>	+/-	A mixed impact is expected, since while increased activity may have adverse effects, actions involving promotion and restoration as part of the upgrading of the tourist product may have a positive impact.
Landscape	Protect and improve the urban and rural	-	The OP is expected to have a negative impact because of the probable establishment of new

Environmental/Social sector	The programme will:	Degree	Comments
	landscape? Reduce the number of neglected areas?		facilities and the increased housing pressure generated by higher incomes. Serious changes are required in attitudes and legislation if increased economic opportunities are to serve to fund actions to improve the landscape.
Natural resources	Reduce the ecological footprint? Reduce demand for raw materials? Strengthen use of recycled materials? Promote sustainable construction? Reduce use of natural resources?	+/-	A mixed impact is expected, since increased production will lead to a rise in demand for raw materials, whereas certain actions in the OP promote sustainable management of natural resources.
Viable accessibility	Ensure easy access to workplace by public transport? Improve access to markets? Reduce number of journeys?	-/+	A negative impact is expected because of the increase in journeys entailed by higher production, in part compensated for by improvement in the statutory framework governing entrepreneurship, networking and improved planning of activities.
Economic growth	Improve the quality of the country's productive fabric? Improve quality of the labour force? Contribute to increased wealth and better distribution of that	++	The impact of the OP on economic growth is expected to be very positive The OP recognizes the existence of exclusions and seeks to end them The OP contains 4 priority axes relevant to the EU policies and Lisbon criteria

Environmental/Social sector	The programme will:	Degree	Comments
	wealth? Increase opportunities for access to employment?		
Tourism development	Promote sustainable tourism which preserves and promotes the environment? Extend the length of the tourist season? Improve accessibility and recognizability of cultural events?	+	The overall impact of the OP on the promotion of sustainable tourism is expected to be positive. Tourism is a key sector of the OP, with clear reference to sustainable tourism. The need to promote the tourism sector and improve the quality of services is clearly stated in the OP.
Energy	Improve the system of energy distribution? Improve network security? Promote energy-saving? Promote use of RES?	++	The overall impact of the OP on the energy sector is expected to be very positive The OP recognizes the need for integration and security of energy networks, the importance of energy saving and increased use of RES, and envisages actions to promote these specific targets

Tackling impact

There are two main components to the task of tackling the impact of the OP Competitiveness and Entrepreneurship. One depends on the programme itself and can be achieved through the use of tools such as environmental impact studies of the individual proposals, the use of options offered by individual actions in the programme, the introduction of criteria for selection and implementation of proposals and the provision of advice to interested parties. The second depends on the broader state machinery and can be achieved through statutory measures, national strategies, national physical planning, suitable specifications and, above all, an increase in the work of inspection and audit by the authorities.

Monitoring

The methodology used has allowed identification of indicators to monitor the impact of implementation of the OP; appropriate indicators are proposed for each individual environmental sector. It is evident that the need to organize the monitoring mechanism will make special demands on the infrastructures of the state in order to ensure continuity of recording. It will be necessary to rank the objectives and indicators in such a way that the monitoring mechanism can operate directly, allowing recording of impact and its evaluation to occur on a correct, objective basis. This will allow attainment of the objective of the Directive, namely the need for possible adjustment of the OP during implementation in order to meet the goal of sustainability.

The sets of indicators are listed below in summary form. This is not an exhaustive list.

Environmental sector	Indicators
Biodiversity, flora and fauna	How many significant habitats are in satisfactory condition Number and/or surface area of protected sites Level of biodiversity, comparison with EU (number of endemic and rare species)
Population and health	Anticipated years of healthy life Industrial accidents
Soil	Quantities of solid waste disposed of at controlled sites Growth in generation of waste, both total figure and per capita Recycling % (paper, glass, biodegradable waste, aluminium)
Water	Quality of surface waters Quality of underground waters
Air	Days on which quality limits are exceeded
Climatic factors and energy *	Emissions of greenhouse gases Growth in energy demand Percentage of energy from RES Percentage of savings in energy use
Management of natural resources	Ecological footprint

Ecological planning and environmental management	
Landscape and cultural heritage	Number of visitors Urban green space per inhabitant

* Of the above indicators, those associated with climatic factors and energy are closest to the OP.

Conclusions

The OP Competitiveness and Entrepreneurship not only promotes green entrepreneurship, which is one of its main components, but also has an enhanced environmental dimension through its separate individual actions; however, this dimension is not sufficiently highlighted. Very small corrective interventions would suffice to emphasize this environmental dimension in both formal and substantive terms, strengthening the positive result of the various actions and weakening negative impact.

ENVIRONMENTAL APPROVAL DECISION

The Joint Ministerial Decision represents the formal environmental approval of the Operational Programme.

MONITORING MEASURES

Monitoring of the significant environmental effects is used to identify possible negative impact which may not have been anticipated, allowing corrective action to be taken. Monitoring is conducted by means of reports at the implementation stage, allowing corrective measures to be introduced where necessary. Indicators are recorded which are linked to the Programme actions and represent possible environmental changes. These indicators will be drawn from the Strategic Environmental Impact Study or defined by written agreement with the competent department of the Ministry of the Environment.

CONSULTATION WITH PUBLIC AUTHORITIES AND THE PUBLIC

By virtue of decision 125976/5.2.2007 of the Special Environmental Service of the Ministry of the Environment, in the context of article 7 of Joint Ministerial Decision ΠΕΧΩΔΕ/ΕΥΠΕ/οικ.107017/5.9.2006 (Gov. Gaz.1225B) a copy of the Strategic Environmental Impact Study was forwarded to

The Ministries of

- Economy and Finance
- Development
- Rural Development and Foods
- Culture
- Tourism
- Merchant Marine
- The Directorate of Planning, the Directorate of Air and Noise Pollution Control and the Departments of Natural Environment Management and General Environmental Issues of the Directorate of Environmental Planning, and the General Secretariat for Public Works of the Ministry of the Environment, Planning and Public Works.
- The Planning and Environmental Protection Agencies of Athens and Thessaloniki
- The Regional Councils of the thirteen Regions of the country
- The Planning Authority, responsible for publication of the Strategic Environmental Impact Study

The text of the Study has been posted on the website of the OP Competitiveness to allow the public to read and comment on the document.

During consultation with the public authorities, Regional Councils and interested members of the public, no objections to the Study were raised.

Given that there will be no significant impact on the environment of any other member state, no transnational consultations were required.

INCORPORATION OF ENVIRONMENTAL DIMENSION

Directive 2001/42/EC on Strategic Environmental Assessment and Joint Ministerial Decision 107017/5.9.2006 require assessment of the environmental impact of Operational Programmes co-financed by the ERDF. Strategic Environmental Assessment involves specific stages defined in the above Directive and Decision. The Strategic Environmental Impact Study of the OP Competitiveness and Entrepreneurship for the programme period 2007-2013 was prepared on the basis of the specifications given in the above Joint Ministerial Decision, as defined more specifically in the circular issued by the Special Environmental Service and the Special Service for Strategic Planning and Evaluation of Development Programmes (July 2006) and the Manual of Strategic Environmental Assessment for Cohesion Policies 2007-2013» (GRDP Partnership, February 2006, Handbook on SEA for Cohesion Policy 2007-2013; Greening Regional Development Programmes Network).

The environmental dimension has been fully incorporated in the Programme: during its preparation there was cooperation between the drafting advisor and the author of the Strategic Environmental Impact Study. The proposals of the ex-ante evaluator for improving the environmental quality of the OP were also incorporated. In overall terms, and on the basis of the findings of the Strategic Environmental Impact Study, the Programme has achieved a high level of compatibility with the environmental dimension, so that no modifications of strategy or objectives are required. Isolated modifications were required for specific targets of the Programme, and at the level of indicative interventions. Some of these changes are covered in the final draft of the Programme. The observations of the Strategic Environmental Impact Study in respect of the introduction of criteria for environmental protection and energy-saving in the proposed investment projects, and the introduction of criteria for strengthening entrepreneurship in neglected areas have been included in the Joint Ministerial Decision and are incorporated in the implementation issues of the individual Priority Axes. Pursuant to the proposals of the Joint Ministerial Decision on approval of the Strategic Environmental Impact Study, the second Strategic Objective of the Programme and the Specific Objective involving strengthening of excellence were both reformulated to include a clearer commitment to the environmental dimension.

At all events, the environmental dimension and priorities of Göteborg are adequately incorporated in the Programme, as is confirmed by the Strategic Environmental Impact Study. The objectives and strategy of the Programme, for which the Strategic Environmental Impact Study does not recommend any amendment, are consistent with the general framework for environmental policies which has been laid down on the European level, and especially with article 6 of the European Union Treaty, on the inter-sectoral dimension of the environment, with the Göteborg conclusions on the EU Strategy for Sustainable Growth, and with the 6th Action Programme for the Environment and the thematic strategies.

2.7. SUMMARY DESCRIPTION OF THE PLANNING PROCEDURE IN THE CONTEXT OF THE PARTNERSHIP RELATIONSHIP

Commencement of preparations for planning of the development interventions of the Fourth Programme Period is marked by the issuing of the 1st Ministry of Economy and Finance Circular (June 2004). In September 2004, by decision of the Minister for Development (8720/856/Φ.Δ.ΚΠΣ, 7/9/2004) a Design Team was set up at the Ministry of Development, comprising officers from the OP Competitiveness Managing Authority and one official from each General Secretariat of the Ministry, whose task was to plan the development initiatives in their areas of competence. Because of the broad range of sectors falling under the Ministry of Development, Working Groups were also set up at the General Secretariats to prepare interventions in their respective areas of responsibility.

By decision of the Minister for Development (2722/229/Φ.Δ.ΚΠΣ, 16/03/2006) the Programme Design Team of the Ministry of Development was expanded to include officials from the OP Competitiveness Managing Authority Implementation Teams, as well as three high-level experts.

Since the Operational Programme also covers the tourism sector, the meetings of the Programme Design Team of the Ministry of Development were invariably attended by a representative of the Ministry of Tourism, while the meetings of the Programme Design Team of the Ministry of Tourism were attended by an official from the Programme Design Team of the Ministry of Development.

The OP Competitiveness Managing Authority and the General Secretariats of the Ministry of Development commissioned special studies to explore and develop special issues in support of the work of the Programme Design Team of the Ministry of Development.

Between September 2004 and the date of submission of the Programme, many meetings of the Programme Design Team of the Ministry of Development were held and the development planning texts were drafted to correspond with the more general procedures of national planning.

A number of meetings were also held to discuss special aspects of the Programme, such as state aid, financing instruments, etc.

The full text framed by the Programme Design Team of the Ministry of Development (in close collaboration with the Programme Design Team of the Ministry of Tourism, subsequent to the 3rd Circular of the Ministry of Economy and Finance) in respect of the main part of the analysis of the current situation, strategy and the main actions in each Priority Axis, was published for consultation on the OP Competitiveness website (www.antonistikotita.gr) (from 01/08/2006 to 31/09/2006). The more detailed programme texts drawn up by the competent planning authorities in the areas of Research and Technology (General Secretariat for Research and Technology), Tourism (Ministry of Tourism) and Commerce (General Secretariat for Commerce) were also published for consultation on their respective sites.

The above agencies carried out consultation with representatives of the basic categories of stakeholder groups in their areas of competence; for example, the General Secretariat for Research and Technology held consultations with various Research Centres.

Planning of interventions by the Energy Department of the Ministry of Development involved the System management agencies, and dialogue was also held with the most important agencies in the energy sector.

The General Secretariat for Industry conducted consultations with the agencies it oversees and the General Secretariat for Commerce held a dialogue with representatives of business associations in the commercial sector.

The Ministry of Tourism held consultations with the professional associations and unions active in the sector, and also staged a National Development Conference for Tourism, attended by a wide range of political, professional and union bodies and representatives of the social partners.

The basic development options of the Programme were also discussed in plenary session by the National Council for Competitiveness and Development.

Consultations were also held with the Expert Panel of the Competitiveness Council.

Similar talks, mainly on issues related to entrepreneurship, SMEs and quality, were held at the National Council for Small and Medium-Sized Enterprises and the National Council for Quality for Development.

At the initiative of the OP Competitiveness Managing Authority a meeting was arranged with the General Secretaries of the 13 Regional Authorities, allowing them to brief one another on development priorities set by the Programme in relation to the priorities of their regions.

Consultations were then held in two phases, the first one on 25 July 2006 and the second on 4 October 2006, with the transitional support regions to discuss the development interventions of the two ministries to be implemented in these regions.

A meeting was held with the Programme Design Team of the Ministry of Education to incorporate Research and Tourism actions in the Ministry's Operational Programme.

Similar meetings were held with the Programme Design Team of the Ministry of Employment to discuss training actions in areas of competence of the Ministry of Development to be supported by the European Social Fund.

In October 2006 the Ministry of Economy and Finance announced that the Programme for Competitiveness and Entrepreneurship will include actions in the culture and health sectors.

In the context of the consultation on the health sector the categories of action were formulated which will be implemented in the Operational Programme Competitiveness and Entrepreneurship and which will involve areas of entrepreneurship, and mainly energy.

A special consultation meeting was arranged with the Ministry of Culture, where officials discussed the possibilities of incorporating cultural actions in the Operational Programme. The Ministry of Culture subsequently sent a text with actions which, suitably adapted, were included in the Programme.

At the initiative of the Ministry of Economy and Finance meetings were held with all the Regional Authorities on 2 November 2006.

Finally, on 15 February 2007, at the initiative of the Ministry of Economy and Finance, a second meeting for ministry officials and officials of the 13 Regional Authorities was held, in order to finalize the content and funding arrangements for the Sectoral and Regional Operational Programmes, to ensure synergy and avoid overlapping.

2.8. CURRENT SOCIOECONOMIC SITUATION AND NECESSARY ADAPTATING OF THE OPERATIONAL PROGRAMME 'COMPETITIVENESS AND ENTREPRENEURSHIP'

After eight years of continuous growth (2000-2007), which was mainly based on consumption and high borrowing, the Greek economy lost its fragile dynamism and finds itself in a period of recession of extended duration, fueled by the international financial crisis and being amplified by the inability to substantially address its major structural weaknesses. As early as the second half of 2008, the consequences of the international financial crisis pervaded the financial system of EU Member States, while the Greek economy entered a phase of recession. The growth of the country's GDP from +5.5% in 2006 dropped to -3.3% in 2009.

The period from 2009 onwards represents for Greece a period of constant recession, as the GDP drop came to -3.5% in 2010 and reached -6.9% in 2011; according to the most recent ELSTAT data, the GDP growth rate during the second half of 2012 was approximately -6.2%. As a result of the continuous recession that the country has been experiencing since 2009, the Greek GDP in 2011 was lower than in 2004, with a cumulative shrinking of 13.1% in the three-year period 2009-2011.

Through the Economic Adjustment Programmes adopted in May 2010 and February 2012, in close cooperation with the European Commission, the European Central Bank and the International Monetary Fund, an effort is underway to address the structural problems of the Greek economy and to correct internal and external imbalances, in order to set the economy on a sustainable course towards growth. Despite the fact that specific measures of fiscal adjustment were taken in regard to cutting spending, increasing revenue and adopting certain structural changes, a series of characteristics and figures of the national economy describe the country's ongoing financial crisis:

- ◆ Investments in 2011 remained on a declining course for the fourth consecutive year, with a reduction exceeding 14.4%. From 2008 to 2011, investment expenditures were reduced by 50%, a development that inhibits the prospects for recovery of the Greek economy and the effectiveness of the fiscal measures taken. In the 1st quarter of 2012, gross fixed capital formation was further reduced by 21.3% in comparison with the corresponding quarter in 2011.
- ◆ There was a small increase in gross domestic added value from production in 2008 as compared to the previous year, although there was a continuous drop during the subsequent years. In 2011, this figure was 6.7% lower than in 2010, a decrease that continued in 2012, with a 6.5% reduction in the first quarter of 2012, as compared to the corresponding quarter in 2011.
- ◆ As recession deepened by the end of 2011, labor market conditions worsened during the same period. Unemployment reached 20,7% up from 12,5% in 2010, with a clear trend towards further increase. In March 2012, unemployment reached 22,6%, versus 15,9% in March 2011. The unemployed increased by 294.706 persons in relation to March

2011 (37.8% increase) and by 21,625 persons in relation to February 2012 (2,1% increase).

In the present crucial period the country has entered, the Operational Programme 'Competitiveness and Entrepreneurship' takes on an additional role: to contribute to the attainment of objectives set by the Stability and Growth Programme and to the national effort for the invigoration of the Greek economy and development of competitiveness – entrepreneurship, as well as the elimination to the extent that it is possible of the negative impact of the serious economic crisis which hinders - among others - the availability of national resources for public and private investments, with direct negative consequences for employment and prosperity.

The strategic targeting of the Programme towards improving the competitiveness and extroversion of enterprises, as well as of the country's production system, with emphasis on innovation, combined with the sectors involved, as well as the nature of those interventions (state aid, funding tools, energy & research infrastructure) strengthen the role of the OP in the country's effort to adopt a new development model.

However, it is clear that the implementation of the Programme's interventions is directly affected by the economic crisis, which has altered the needs, priorities and investment planning of enterprises, which are the final beneficiaries of most of its actions.

Within this framework, the adaptation of the Programme to the new reality that has emerged in relation to the economic environment within which the country is forced to operate, as well as the need for gradual restoration of the developmental dynamism of the Greek economy and the strengthening of its competitiveness is a primary objective and shapes the basic adjustments required as follows:

- targeted actions to strengthen entrepreneurship, extroversion and employment, placing special emphasis on supporting youth employment
- Strengthening enterprise liquidity and increasing the total volume of credits which the Greek financial sector makes available to SMEs, through the creation of a new financing instrument (guarantee fund) in cooperation with the European Investment Bank (EIB)

3. DEVELOPMENT PRIORITIES

3.1. DESCRIPTION OF PRIORITY AXES

P.A.1: GENERATION AND UTILISATION OF INNOVATION SUPPORTED BY RESEARCH AND TECHNOLOGICAL DEVELOPMENT

Strategy – General Objective

Priority Axis 1 strives to accelerate the transition to a knowledge-based economy, the incorporation of research, technology and innovation in the country's productive fabric, as main factor of development and competitiveness, and the wider dissemination of research and innovation results in the Greek economy and society. Within this framework, the Axis aims at strengthening Research, Technology and Innovation in all sectors as a fundamental factor for the restructuring of the Greek economy and the transition to a knowledge-based economy.

In order to achieve the General Objective, the Axis has set the following priorities:

- I. Increasing and Improving investment in knowledge and excellence
- II. Promoting innovation and dissemination of new technologies and entrepreneurship.

Specific objectives

In order to serve its pursuits and to achieve its General Objective, the development strategy of the Axis has an operational specialization in the following Specific Objectives:

- Reducing the research, innovation and technology gap in relation to the EU-15 average.
- Strengthening the participation of enterprises in RTD and making the interconnection between the country's research system and the productive sectors of the economy more effective.
- Strengthening excellence and excellence generation that produce innovation, as well as high economic, environmental and social added value.
- Promoting integrated innovation development systems in (geographic and thematic) areas with a strong business base and active, extrovert research agencies.
- Expanding and enriching the research human resources and strengthening their business spirit and geographic and intersectoral mobility.

The following main principles govern the design of interventions and are will be pursued also during implementation:

- ✓ Enterprises will continue being the main receiver of proposed actions. Actions however will be mainly focused on groups and networks of enterprises, as well as on the cooperation between production and R&D agencies. Aid to individual enterprises will be limited and will be mainly addressed to new small and medium sized enterprises (SMEs).

- ✓ Promotion of integrated interventions, focused on sectors/areas of high priority for the Greek economy that will contribute to its restructuring towards sectors, products and services with higher added value.
- ✓ Within the framework of a globalized economy, extroversion will be a fundamental feature of all proposed actions. Consequently, international cooperation with agencies in other countries will be possible.
- ✓ The actions that will be promoted, depending on their range and their objectives, will be implemented at national and regional level. The first group encompasses actions aiming at the establishment of an economy of scale and purpose at national and European level. Their implementation requires cooperation and synergy among the most suitable private and public sector agencies and the valorisation of the best research teams and infrastructures. The second group includes smaller scale actions, focused on the needs and the characteristics of each region. In this case, the creation of R&D infrastructure is also included, provided that they are created to serve mainly the purposes and needs of the regional economy.
- ✓ During the implementation of actions, emphasis will be placed a) on objectives, and to a lesser extent financial instruments; provisions will be made for the use of several financing schemes, deemed most suitable for the achievement of individual objectives and b) on action contributing to increasing private investments in Research and Technology and to strengthening innovativeness and the incorporation of new technologies and knowledge in enterprises.
- ✓ The promotion of innovative, environment-friendly interventions, contributing towards development and employment will also be pursued.

Indicative Actions

Priority Axis 1 includes two general categories of intervention ("sub-axes"), including the following specific Actions:

- **«Knowledge-Excellence»:** Promotion of RTD activities having as direct objective the production of new knowledge, mainly through the cooperation between enterprises and Research & Technology (R&T) agencies in Greece and abroad, the support of excellence centres and their promotion at the international level. The main pursuits of the Actions included in this unit are the improvement of competitiveness and the strengthening of extroversion of Greek enterprises, within the framework of the long-term objective of restructuring of the Greek economy through a shift to the production of high-tech and high added value products and services. Within this framework, particular use will be made of the promotion of R&T cooperation at regional, national and European level and the specialization and mobility of human resources. The following provides an indication of the Actions that are being supported:
 - ✓ **«Synergasia» ("Cooperation"):** actions of cooperation between production and R&T agencies. These actions are particularly important given that they concern cooperation between productive enterprises (the majority of which are SMEs) and research agencies for the implementation of research projects, innovative processing and dissemination actions aiming at improving enterprise competitiveness and quality of life, strengthening the link between research and production, an interdisciplinary scientific approach and extroversion through international R&T cooperation. It is being implemented in priority sectors (top – down approach) mainly through short-to-medium term R&T projects. The projects

cover research and innovation actions (basic and industrial research and experimental development) The beneficiaries of this Action are cooperation schemes between enterprises of every size and type, Universities (AEI), Technical Education Institutes (TEI), public and private Research Centres and Institutes, users agencies and other agencies having activities and objectives similar to the programme's objectives, in Greece and abroad.

- √ Actions for the encouragement and the development of the Industrial Research and the Experimental Development by a larger number of Greek enterprises of high-potential, in order to promote their competitiveness and offer products and services of highly added value. Indicative actions: supporting New⁴⁹ and Small-and-medium-size Enterprises, PAVET (programme for the industrial R&D). The actions are implemented in thematic areas – priority sectors (top – down approach).

- √ International cooperation in Research and Technology:
 - European R&T Cooperation, which facilitates the coordination of the national R&T policy with R&T policies in other member states, the policy of the EU and of European-scope International Organizations for the achievement of economies of scale and purpose, through the implementation of common R&T actions in fields of national and European interest as well as actions related to the promotion of environmentally-friendly objectives in synergy-complementarity with the CIP and the development of common infrastructures, having as their main objective the support and acceleration of the country's integration in the European Research and Innovation Space.⁵⁰ Indicative actions: JTIs⁵¹ (ENIAC & ARTEMIS), JPIs⁵², MarinERA, MariFish.
 - Bilateral, multilateral and regional R&T cooperation. The objectives of the Action are a) the financing of projects on the basis of bilateral R&T agreements, among other things, b) strengthening multilateral cooperation and c) undertaking the initiative to strengthen ties with groups of third countries whenever there is political and/or economic interest, such as China, South Eastern Europe, BSEC and Mediterranean countries, also through the financing of agencies and groups from these countries in R&D programmes of national interest.

- √ Supporting Policies and coverage of future needs⁵³: Strengthening R&T projects and/or implementation of studies (e.g. technology forecast studies, impact assessment of Actions, recording of national policies and indicators in R&T etc.) and creation of technology platforms with a view to supporting policy design and evaluation and/or supporting policies in the stage of implementation, including EU policies and directives, applying the open method of coordination, as well as cooperation policies with international organizations (such as e.g. supporting interventions related to the promotion of the objectives of the EU Action Plan for

⁴⁹ New enterprises up to 6 years from their date of establishment (regardless of size and form), as well as enterprises regardless of size, time of operation and form, that have not been funded for research to date by national and Community resources and programmes (new enterprises in the sense of newly appearing).

⁵⁰ These actions are also given priority in the EU guidelines on cohesion policy 2007-2013.

⁵¹ Joint Technology Initiatives

⁵² Joint Programming Initiatives

⁵³ Priority sectors or actions that cannot be foreseen in the present phase.

environmental technologies as well as the New Energy Policy for Europe⁵⁴, interventions in policy fields such as health, etc.). In some cases, the specialization of actions will be carried out after consultation – cooperation with the competent Ministry and competent agencies. Indicative actions include cooperation with the Ministry of Environment, Energy & Climate Change, the General Secretariat for Research & Technology of the Ministry of Education & Religious Affairs, and the Centre for Renewable Energy Sources (KAPE) for 'Green Island – Ai Stratis', a visionary research and demonstrating project, aiming at rendering the island of Agios Efstratios of the Prefecture of Lesvos an international reference regarding the penetration of RES and the energy efficiency.

- √ 'Developmental Proposals by Research Agencies – KRIPIS': Its purpose is to support the strategic growth and competitiveness of Research Agencies (RA) supervised by the GSRT, as well as maintaining or pursuing excellence in the research fields in which they are active.
- √ Promoting access to European R&T infrastructure, including R&T facilities of international organizations. The Action's beneficiaries are research teams in research centres / institutes and universities (AEI) and Superior Technical Education Institutes (ATEI). Indicative actions include European R&T Cooperation – Support & development of Greek research partners in their participation in Joint Ventures of European Research Infrastructure of ESFRI/2006, e.g. 'SHARE', 'CLARIN-ATHINA', 'LIFEWATCH-HIPER-ELI', etc., development of housing and operation infrastructure of the European Network and Information Security Agency (ENISA), etc.
- √ Science and Society. The Action's objective is the incorporation of science in the social fabric and the promotion of entrepreneurship among young people. To this end, actions informing the public on scientific matters, disseminating research results to the public at large, programmes strengthening entrepreneurship among young people through the support of innovative ideas in secondary and tertiary education, etc. are being promoted. Emphasis is being placed on awareness building among the public and the young in particular in relation to environment-friendly technologies and environment-friendly innovative business activities promoting sustainable development.
- √ Strengthening research and technology infrastructure whenever deemed necessary in accordance to international developments and the needs of the regional economy within the framework of the RTD strategy of the OP Competitiveness and Entrepreneurship.

«Value»:

Promotion of innovation (directly), of the dissemination of new technologies and entrepreneurship through actions supporting the transformation of knowledge into innovative products, processes and services, the transfer of technology and know-how to enterprises, particularly SMEs, and the coverage of the gap between technological knowledge and the market.

- √ Creation and support of single-discipline and/or interdisciplinary scientific innovation clusters in peak sectors showing a competitive advantage. The Action's beneficiaries are cooperation schemes [clusters] defined as groups of enterprises

⁵⁴ Decision 7181/06 of the Council of the European Union

(mainly but not exclusively SMEs) and other public or private support organizations, linked in an added value chain, combining knowledge intensity, high technology and the capacity to strengthen the presence of Greek enterprises in the domestic and international markets. The related actions include the continuation of the pilot Action of EPAN – PHASE I in Phase 2 – Hellenic Technology Clusters in Microelectronics – Support for agencies (Corallia) and infrastructure in Athens and Patras.

- √ Strengthening the Offer and Demand of Research, Technology and Innovation Services. The Action's main objective is to support the technological needs of enterprises, particularly SMEs, and the sector of services, among other things through the action «Voucher for SMEs», that supports SMEs in purchasing innovative consultant and support services from intermediate innovation agencies.
- √ Creation-Support of new, innovative enterprises, mainly knowledge-intensive enterprises (spin-off and spin-out). The Action aims at strengthening the Greek innovation system through the development of new business activities based on the utilisation of research results. The purpose of the action is to promote research and entrepreneurship and to incite the implementation of research and technology projects by a larger number of enterprises, the creation and development of innovative business activities, the utilisation of patents with commercial exploitation prospects, the implementation of innovative investment schemes and the utilisation of the knowledge produced by researchers and enterprises undertaking innovative activities.
- Horizontal actions:
 - √ Technical Feasibility Studies and project preparation support: These studies precede some research and innovation actions, particularly in the case of wide range actions, and aim at ensuring a better preparation of such actions. Also included are studies for the preparation of projects for participation in European research, technology development and innovation programmes.

The flexibility clause is used to implement:

Education and training actions, actions to attract researchers and actions for the specialization of young researchers within the framework of the specialised support of human resources that fall within the scope of intervention of the European Social Fund and are necessary for the effective implementation of the actions of this Priority Axis.

The choice of thematic priorities for the actions of Priority Axis 1, depending on their objectives and their specific content, can include three categories: a) focus on priority areas (to a larger extent, particularly for the actions of Sub-axis "Knowledge-Excellence"), b) a mainly bottom-up approach and c) a combination of these two choices.

The focus on priority areas is particularly important in some large interventions (as to the number of agencies involved, duration and budget), pursuing to achieve in the long term the restructuring of the national economy in high added value sectors with the support of RTD actions following the same approach (top down) such as the action 'Synergasia' ("Cooperation"), 'Support for New Enterprises' and 'SME Groups for Research & Technological Development Activities', "PAVET", bilateral cooperation in RTD, etc.

According to the above, the basis on which thematic priorities will be chosen is the relevant study completed in 2007⁵⁵. Within the framework of the study, the proposal for the choice of priorities was based, on the one hand, on the composition of technology areas important for the Greek industry and of areas in which the Greek research community stands out, and on the other hand, on the opinion of experts specializing in each thematic unit.

The final priority choices for the actions in the Axis ensued from the final processing of the findings of the study and subsequent completion of the consultation with research, production and other agencies as well as the public. The thematic priorities which ensued from the study are:

- Information and Communication Technologies
- Agriculture, Fisheries, Animal husbandry, Food and Bio-technology
- High added value products and production technologies in traditional fields
- Advanced materials, nanotechnology-nanoscience and micro-electronics
- Energy
- Transports
- Environment
- Space
- Health
- Security technologies
- Cultural heritage
- Financial science
- Social and economic dimension of development

⁵⁵ Strategic Plan for the development of Research, Technology and Innovation under the NSRF 2007-13

The second category (bottom up approach) includes (as an indication) the actions of support for the creation of knowledge-intensive enterprises (spin-off / spin-out), creation of innovation clusters, support to SMEs in the acquisition of consulting services (Innovation vouchers), etc.

The third category includes the policy support action, planned in cooperation with the corresponding policy-making and other competent agencies, etc.

Beneficiaries, implementation issues

The Actions in the Axis benefit the agencies described below and in particular various forms of cooperation among them:

- ✓ Enterprises and enterprise cooperation / networks / associations / clusters of any type and size.
- ✓ Universities (AEI), Technical Education Institutes (TEI), private and public Research Centres, Institutes and Laboratories, as well as networks thereof.
- ✓ Agencies participating in approved programmes of the 7th RTD Framework Programme and/or the Innovation Programme of the Framework Programme for Competitiveness and Innovation.
- ✓ International public and private R&T agencies and organizations.
- ✓ Agencies providing and transferring technology and technology services.
- ✓ Spin offs and spin-outs.
- ✓ Chambers, unions of enterprises, financial organizations and other agencies with activities similar to the Axis' objectives.
- ✓ Natural persons, researchers - inventors.
- ✓ Users' agencies with activities and objectives similar to the Axis' objectives, in Greece and abroad.
- ✓ In some cases, the beneficiaries of the Axis' actions are also foreign agencies. The requirements for the participation of these agents, their role and the eligible expenses are defined in the corresponding action.

In the wider meaning of the word, beneficiaries of the Axis' interventions is also the public at large, through the dissemination of the results of research and innovation in the Greek economy and society, programmes strengthening entrepreneurship among young people through the support given to innovative ideas in secondary and tertiary education, etc.

In the implementation of the actions of the Axis, the provisions of the Joint Ministerial Decision on the approval of the Strategic Environmental Impact Study of the "Competitiveness and Entrepreneurship" Operational Programme 2007-2013 are taken into consideration.

State aid

The following are taken into consideration in the implementation of the actions:

- The Guidelines on Regional State Aid 2007-2013
- The State Aid Framework for Research, Development and Innovation (2007-2013)
- Commission Regulation (EC) 1628/2006 of 24 October 2006 on the application of Articles 87 and 88 of the Treaty to regional investment aid
- Commission Regulation (EC) 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to de minimis aid
- Commission Regulation (EC) 800/2008 of 6 August 2008 (General block exemption Regulation)
- Regulation 2006/C 323/01 section 5.1.7 (International competition – adaptation clause)

In cases of state aid actions that do not fall within the scope of Commission Regulations (EC) No 1998/2006 and (EC) No 800/2008, the DG Competition will be notified accordingly.

P.A.2: STRENGTHENING ENTREPRENEURSHIP AND EXTROVERSION

Strategy – General Objective

Priority Axis 2 strives to expand extrovert entrepreneurship, as a basic way for the country's production upgrading to high added value, environmental sensitive, knowledge incorporating and innovative goods and products, thus contributing to the country's exit from the conditions of economic recession.

Within this framework, the Axis aims to strengthen entrepreneurship and extroversion, upgrade the country's production fabric, increase production investments and Direct Foreign Investments inflows, and achieve a qualitative upgrading of products and services offered in all the sectors and branches of the Greek economy covered by the Programme.

Through the implementation of the targeted actions of the Axis that concern the restructuring and support of enterprises, the objective is to tackle the important problems of the enterprises caused by the economic crisis. The gradual addressing of these problems will lead to the development of enterprises, the creation of added value, the preservation and creation of jobs and the enhancement of their competitive position in the domestic and international market.

A total of two main categories of indicative actions have been determined. The first category is the one, supporting investments aiming at strengthening the presence of Greek enterprises in the domestic and international markets, the protection of the environment and its business valorisation, the implementation of integrated innovative interventions towards the modernization – restructuring of the tourism sector and business “excellence”. These actions target to the quality characteristics of the investments, such as innovation and extroversion, as well as to the creation of new jobs. This is illustrated at the selection criteria of the final recipients, through increased relevant weighting factors. Additionally, economic sectors, that can become development leverage for the country, whether they are selected for the application of specific actions, or they gain a higher mark at the evaluation.

The second main category includes aid supporting the development of entrepreneurship (creation of new enterprises by groups with limited entrepreneurship, special population groups, wider social groups). Emphasis is placed on the provision of business incentives to population groups such as young people, who are particularly affected by the economic crisis, while creating new jobs and contributing to the 'Youth Employment' initiative of the European Union. Also in this category, emphasis is given- through the selection criteria - in specific qualities such as innovation, extroversion, environmental sensitivity and added value at regional-local level.

Finally, the Axis can, if necessary, also include – with the use of the flexibility clause – a third category, complementing the two main ones, pertaining to the enrichment, upgrading of skills and increase of the mobility of human resources in the secondary and tertiary sector benefiting from the actions of the Programme.

Specific objectives

In order to serve its pursuits and to achieve its General Objective, the development strategy of the Axis has an operational specialization in the following Specific Objectives:

- Supporting and increasing productive investments that contribute to strengthening the presence of Greek enterprises in the domestic and international markets. Emphasis will be placed on qualitative upgrading, standardization and certification of Greek products and enterprises.
- Focusing the development efforts on clusters, areas and types of enterprises showing more positive outlooks or having more acute needs – Re-orienting the processing activity and its “traditional” branches towards branches and products with a higher added value.
- Restructuring and support of enterprises facing significant problems due to the economic crisis through targeted actions. The gradual addressing of these problems will lead to the development of enterprises and the enhancement of their competitive position in the domestic and international market.
- Upgrading / transforming necessity entrepreneurship into high potential entrepreneurship – Upgrading of the business base in sectors lagging behind in terms of the development of entrepreneurship or operating within obsolete schemes.
- Strengthening the role of trade and accompanying services in the production system, with emphasis on supporting investment plans intended to strengthen the presence of Greek enterprises in the domestic and international markets.
- Expanding industry – trade – services networking.
- Strengthening entrepreneurship in the tourism sector, giving priority to the promotion of plans aiming at the qualitative upgrading and differentiation of the tourism product, the lengthening of the tourist period on the entire territory and the development of special forms of tourism.
- “Business” valorisation of the environment as a tool to attract domestic and foreign investments.
- Upgrading human resources with targeted actions that work in synergy with the other actions of the Priority Axis.

Indicative Actions

The Axis' interventions pertain to aid actions having as a main orientation the development of entrepreneurship and the improvement of the competitiveness and extroversion of enterprises and the production system. The main criteria of individual interventions are the generation of high added value, the creation of viable competitive advantages and the promotion of extroversion. Within the framework of the Axis' actions particular emphasis shall be placed on the strengthening of small-and-medium-sized enterprises as a fundamental tool supporting competitiveness and employment.

The Axis includes the following indicative Actions:

- Actions assisting enterprises towards modernization and upgrading
 - √ Integrated Business Plans supporting productive investments – utilising the incentives of the Investment Law, as in force – that contribute to:
 - Strengthening the presence of Greek enterprises in the domestic and global markets
 - Interconnection with global integrated production systems
 - Development of cooperation between Greek and international enterprises
 - Capitalizing on Greek business capital for the upgrading of domestic business units towards activities with higher added value
 - Attracting foreign activities and direct investment, provided they contribute to the sectoral and technological upgrading of the production system
 - Development and implementation of technological or organizational innovation
 - Standardization and certification of products and services through the adoption of internationally accepted quality standards, the development and commercial establishment of logos, etc.
 - Vertical integration of production, development of integrated systems for products, services, or complementary products and services
 - Protection of the environment, incorporation of the environmental dimension in the operation of enterprises, environmental management and improvement of environmental performance
 - Business utilisation of the concept of environmental protection, through interventions in sectors such as waste management and/or reuse, recycling, etc.

Business Plans aim mainly at:

- Upgrading small and medium-sized enterprises facing problems of low competitiveness, reduced demand due to unfavourable market conditions, inability to expand, etc.

- Upgrading the sectors with higher added value and/or upgrading towards higher added value in “traditional” branches.
- √ Collective Business Plans supporting actions of extroversion of business clusters that contribute to:
 - Upgrading towards sectors with higher added value and/or rapidly developing sectors, that will help to strengthen the outward competitiveness by fostering extroversion and international joint ventures
 - Developing cooperation and synergies of industry – trade – services networking, as well as cooperation among Greek and international companies, in order to strengthen the competitive presence of Greek enterprises to international markets
 - Qualitative upgrading of products – services to ensure the competitive advantage
- √ Targeted actions for supporting enterprises, aiming at the restructuring of their organisational framework and the modernisation of their operation, so as to respond to the problems created by the financial crisis, while creating the conditions for the qualitative diversification of their products and services and the strengthening of their presence in the domestic and international market.
- √ Integrated innovative actions for the modernization – restructuring of the tourism sector pertaining to:
 - Supporting tourism investments through the Development Law with a view to expand, enlarge and upgrade the tourism product
 - Developing special forms of Tourism, i.e. a) Investment Plans for the development of sea tourism, spa/therapy tourism, nature tourism/eco-tourism, urban tourism (cultural, conference, exhibition and incentive tourism), religious tourism, etc. b) Investment plans for the upgrading of infrastructure and of services offered in marinas and tourist ports, c) Investment plans for the restoration and tourist exploitation of traditional and/or listed buildings, areas, vessels, traditional restaurant enterprises, etc. and d) other investment plans for the development of special forms of tourism.
 - Special programmes supporting tourism sector enterprises that are not included in the Development Law, development of cooperation networks, global quality actions, implementation of environmental and energy management standards in tourism facilities, support to investment plans for the use of alternative and renewable sources of energy.
- √ Acquisition of business excellence and linking of same with the dissemination of good practices among new entrepreneurs.
- Integrated Programmes for the Development of Entrepreneurship pertaining to:
 - √ The creation of new enterprises by social groups displaying today limited entrepreneurship and in areas hit by de-industrialization and unemployment.

- ✓ Reinforcing the entrepreneurship of special social groups and entrepreneurship in new and innovative activities (such as Youth and Female Entrepreneurship, Innovative Entrepreneurship).
- ✓ Reinforcing the initiatives of social economy at large that include socially-minded activities and initiatives, such as citizen care and life quality activities, protection of the environment, cultural development, sectors which one way or another do not attract the interest of private initiative nor do they constitute a significant field of activity for public sector enterprises.

Through the use of the flexibility clause, it will be possible to implement actions of specialised support of human resources that fall within the scope of intervention of the European Social Fund and are necessary for the effective implementation of the actions of this Priority Axis.

It is noted that within the framework of the Axis, support will be given also to private investments approved by 31/12/2006 and to be implemented during the 2007-2013 programming period, following the confirmation of their compatibility with the objectives of P.A. 2.

Beneficiaries, implementation issues

The interventions of Priority Axis 2 include support actions for the development of entrepreneurship and strengthening of competitiveness in the sectors of processing and services, tourism and trade.

Beneficiaries of the Axis' actions will be:

- ✓ Enterprises and cooperation / networks / clusters of enterprises of any type and size, with emphasis on SMEs.
- ✓ Natural persons – businessmen / investors.
- ✓ Persons from special social groups (mainly youth and women, who are particularly affected by the current economic crisis).
- ✓ Modern financial organizations and instruments that will participate in the investment / business activity.

In the wider meaning of the word, beneficiaries of the Axis' interventions will also be the public at large, through the development of entrepreneurship, strengthening of employment and improvement of the standards of living.

Alternative legal forms of aid can be:

- ✓ Global grants through national or regional agencies
- ✓ Public Private Partnerships
- ✓ Special aid regimes of the Ministry of Development and the Ministry of Tourism, the Investment Law

In the implementation of the actions of the Axis, the provisions of the Joint Ministerial Decision on the approval of the Strategic Environmental Impact Study of the

“Competitiveness and Entrepreneurship” Operational Programme 2007-2013 are taken into consideration.

State aid

The following are taken into consideration in the implementation of the actions:

- The Guidelines on Regional State Aid 2007-2013
- The Investment Law as in force
- Approved investments within the framework of Law 3299/2004
- The Commission Regulation (EC) 1628/2006 of 24 October 2006 on the application of Articles 87 and 88 of the Treaty to regional investment aid
- The Commission Regulation (EC) 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to de minimis aid
- Commission Regulation (EC) 800/2008 of 6 August 2008 (General Block Exemption Regulation)

In cases of state aid actions that do not fall within the scope of Commission Regulations (EC) No 1998/2006 and (EC) No 800/2008, the DG Competition will be notified accordingly.

P.A.3: IMPROVING THE BUSINESS ENVIRONMENT

Strategy – General Objective

The presence of a suitable, healthy external environment supporting entrepreneurship constitutes a very important factor in terms of enhancing competitiveness and entrepreneurship and reducing business risks.

According to the 2006 Annual Report on Competitiveness «... the creation of new, competitive enterprises must be accompanied by three characteristics: more modern capital equipment, comparatively better quality of banking services, advantages ensuing from the use of better natural resources.....».

Priority Axis 3 includes actions focused on the fulfilment of the above prerequisites that expand the possibilities for successfully exercising business endeavours offering a favourable environment to Greek enterprises.

In particular, it strives to improve entrepreneurship and enhance competition by ensuring suitable conditions of market deregulation, technical infrastructures, support structures and development tools in combination with the protection of consumers' rights, consumers being the ultimate judge of the qualitative dimension of the production system, boosting healthy competition and supporting the investment momentum of enterprises.

Within this framework, the Axis aims at improving the institutional environment and support structures, infrastructures, mechanisms and tools for the development of entrepreneurship, strengthening of competition and protection of consumers.

Specific objectives

In order to serve its pursuits and to achieve its General Objective, the development strategy of the Axis has an operational specialization in the following Specific Objectives:

- Upgrading and simplification of the business environment and its regulatory framework. Support for institutions that promote and support business activities – Spatial arrangement of economic activity.
- Development and utilisation of modern financial support tools for the undertaking of business risks and improvement of access to funding for micro-enterprises and SMEs active in Greece.
- Support of the system of structures for support to entrepreneurship, aiming at providing valid and effective services to the business community.
- Strengthening of infrastructure that supports quality entrepreneurship, creates economies of scale and purpose, reinforces cooperation with public or other knowledge-producing agencies and mediates for the transfer and dissemination of innovation.
- Upgrading of supervisory mechanisms for market control, strengthening of competition, upgrading of the quality of Greek products and services and reinforcement and protection of consumers' rights.
- Promotion of the country's tourism product, including special forms of tourism, as well as of Greek quality products and brand products.
- Strengthening of the valorisation infrastructure of the country's' cultural reserves and natural heritage as a means to improve the country's attractiveness as a tourism destination.
- Upgrading of human resources with targeted actions that work in synergy with the other actions of the Priority Axis.

Indicative Actions

With a view to achieving its general and specific objectives, Priority Axis 3 includes: (a) interventions reinforcing and rationalizing the support structures of entrepreneurship, technology transfer, etc. (b) interventions for the development, expansion, simplification and dissemination of modern financial tools, (c) interventions for the upgrading of the operating and competitive environment, deregulation of goods and services markets and reinforcement of consumers' protection, (d) interventions completing or upgrading infrastructure deemed necessary to support and promote entrepreneurship, competitiveness and innovation, (e) interventions to improve administrative support to development in the OP sectors of intervention with the use of new technologies and (f) interventions for an effective promotion of Greek brand names in Greece and abroad.

As an indication, the following breakdown lists the Actions included in the Axis:

- Upgrading and simplification of the regulatory framework, supporting investments needed for:
 - √ The National Market Supervision System and its regional specialization
 - √ Cultivating the adaptability of enterprises and development of corporate social responsibility systems
- Support of the system of structures for support to entrepreneurship, production of strategic information in market matters, technological mediation and promotion and dissemination of innovation. Within this framework, existing agencies such as the Observatory for SMEs, Investor Support Centres [one-stop-shops], etc. will be utilised.
- Creation of Financial Engineering Instruments to facilitate access to funding for enterprises in order to ensure their smooth operation and strengthen their investment activity during harsh economic circumstances, such as:
 - √ Holding Funds for enterprises (business capital funds, guarantee funds and loan funds) for financing via lending or provision of guarantees for investment and business schemes under favourable terms.
 - √ Risk sharing and micro-credit products (JEREMIE Initiative) addressing micro-enterprises and small enterprises.
 - √ Guarantee Fund of the European Investment Bank for improving access of SMEs to funding, strengthening entrepreneurship, investments and the development of the country's SMEs.
 - √ Business Angels and Mentor
 - √ Creation of seed capital, with a view to expanding financial means in the implementation of the national research and technology policy and the innovation policy.

and:

- √ Actions facilitating SMEs' access to the services provided

- √ Extension of guarantees provided to Medium Enterprises or SMEs networks in the context of new products.
- Modernization of business infrastructure and support of investment needed for:
 - √ Relocation of enterprises to Business Parks.
 - √ Creation of specialized industrial, commercial and tourist infrastructure with possible involvement of private and public sector (PPPs).
 - √ Supply Chain infrastructures
 - √ Support to Quality Infrastructure
 - √ Support to Enterprise Incubators
 - √ Support to Enterprise pre-incubation
 - √ Implementation of environmental upgrading programmes in areas with a large industrial concentration
 - √ Completion and upgrading of infrastructure for the development of the tourism sector and the valorisation of the natural and cultural reserves as means to increase the attractiveness of the country and its regions as a tourism destination.
 - Projects for the development of marine tourism, creation of reception areas in commercial ports, etc.
 - Creation of tourism development nuclei and poles within the framework of thematic, cultural, nature-loving, eco-tourism actions of national, interregional and regional importance.
 - Pilot actions to highlight and promote a mild tourism exploitation of ecologically sensitive areas, and natural and cultural heritage areas.
 - Developing public investment in the sector of culture, with emphasis on the protection and promotion of antiquities and of the cultural heritage.
 - √ Actions to highlight-promote products and services
- Actions to reinforce consumers' protection and improve the market supervision mechanisms:
 - √ Creation of infrastructure within certification agencies and competent laboratories for the laboratory control and certification of products
 - √ Support of the institution of Consumer Associations, aiming at protecting the rights and interests of the consumers
 - √ Modernization of support institutions and monitoring mechanisms in the commercial sector
- Actions to highlight – promote products and services:
 - √ In collaboration with collective organizations and institutions responsible for promoting the Greek export activity, specifically actions are designed aiming at improving the competitiveness of the Greek economy, as well as the emergence of

dynamic sectors and the penetration of Greek firms to new markets with strong business interest

By means of the flexibility clause, it will be possible to implement actions of specialised support of human resources that fall within the scope of intervention of the European Social Fund and are necessary for the effective implementation of the actions of this Priority Axis.

Beneficiaries, implementation issues

The interventions of Priority Axis 3 refer to all the fields covered by the Programme (Research – Technology, Energy, Processing – Services, Tourism, Trade – Consumer protection).

The beneficiaries of the Axis' Actions will be:

- ✓ Enterprises of any type and size active in the fields covered by the Programme.
- ✓ Natural persons – businessmen / investors.
- ✓ Structures supporting entrepreneurship and technology transfer.
- ✓ Modern financial organizations and instruments.
- ✓ Agencies developing or incubating innovation and knowledge-intensive enterprises (Technology Parks, Incubators, etc.)
- ✓ Agencies for the Development and Management of Business Parks.
- ✓ Certification agencies and organizations and market supervision mechanisms.
- ✓ The Greek consumers and consumer organizations.
- ✓ Persons belonging to special social groups.
- ✓ Public services and organizations competent for the planning, monitoring and management of interventions and policies in the fields covered by the Programme.
- ✓ Local Authorities and the agencies they supervise

The beneficiaries of the Axis' interventions in a wider sense will include the public at large, through the improvement of the business environment and conditions of competition and market control, the strengthening of employment and the improvement of the standards of living.

The actions will be implemented in synergy with actions with similar contents in the Operational Programmes «Improving the Administrative Capacity of the Public Administration» and «Digital Convergence».

In the implementation of the actions of the Axis, the provisions of the Joint Ministerial Decision on the approval of the Strategic Environmental Impact Study of the "Competitiveness and Entrepreneurship" Operational Programme 2007-2013 are taken into consideration.

State aid

The following are taken into consideration in the implementation of the actions :

- The Guidelines on Regional State Aid 2007-2013
- The State Aid Framework for Research, Development and Innovation (2007-2013)
- The Guidelines on State Aid provided to promote business capital investments in small-and-medium-sized enterprises
- Commission Regulation (EC) 1628/2006 of 24 October 2006 on the application of Articles 87 and 88 of the Treaty to regional investment aid
- Commission Regulation (EC) 1998/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to de minimis aid
- Commission Regulation (EC) 800/2008 of 6 August 2008 (General Block Exemption Regulation)

In cases of state aid actions that do not fall within the scope of Commission Regulations (EC) No 1998/2006 and (EC) No 800/2008, the DG Competition will be notified accordingly.

P.A.4: COMPLETION OF THE COUNTRY'S ENERGY SYSTEM AND ENHANCEMENT OF SUSTAINABILITY

Strategy – General Objective

Priority Axis 4 strives to ensure the country's energy supply,, support the deregulation of the energy market and the country's integration in the large international power and natural gas supply networks, while also contributing to the achievement of the country's environmental objectives and commitments deriving from Directive 2009/28/EC on energy and climate change ('20-20-20' Objectives) by the year 2020.

Within this framework, the Axis aims at the completion of the country's energy system and enhancement of sustainability.

Specific objectives

In order to serve its pursuits and to achieve its General Objective, the development strategy of the Axis has an operational specialization in the following Specific Objectives:

- Security of energy supply, reducing the country's dependence on oil, by promoting natural gas and electricity energy networks and further penetration of Renewable Energy Sources (RES) in the energy balance, as well as energy savings and improvement of energy performance
- Enhancing the country's geo-strategic role in the wider area's energy map, by incorporating it in the large international electricity and natural gas supply networks

- Exploitation of new technologies towards the modernization and improvement of energy networks safety
- Rational management of natural resources.

Indicative Actions

As an indication, the Axis includes the following Actions:

- Actions promoting the use of natural gas, with projects for:
 - ✓ The penetration of natural gas in households and in the tertiary sector, though the development of distribution networks in new areas
 - ✓ The extension of the National Natural Gas Distribution System and increase of its capacity and stability,
 - ✓ The extension of existing and/or creation of new Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG) infrastructures
 - ✓ The establishment of metering – pressure regulating stations to measure supply and regulate pressure and/or natural gas compression stations.
- Actions for the completion - modernization of the country's power network, with projects targeting:
 - ✓ The connection of islands to the National Transmission System, so as to deal with power resource adequacy on the one hand and to increase the penetration of Renewable Energy Sources in insular regions,
 - ✓ Construction of new connection lines, with a view to ensure supply sufficiency, upgrading at the same time the country's role in the power systems of SEE countries,
 - ✓ Construction of high voltage centres to ensure unhindered power supply, supply security in the southern system and increase its stability,
 - ✓ Strengthening and expansion of the Energy Transmission System and Distribution Network,
 - ✓ Implementation of smart grids and installation of meters / telemetering system for managing the demand for electricity connections by domestic and small commercial consumers, with a view to develop a rational tariff policy
 - ✓ The control of the Transmission System and the smooth operation of the deregulated market.
- Actions supporting the penetration of Renewable Energy Sources (RES) and energy saving, with projects such as:
 - ✓ Investments for the generation of energy from RES and high-efficiency CHP ,

- ✓ Interventions targeting energy saving and improvement of energy efficiency, with emphasis placed on the domestic sector,
- ✓ Energy-related investments with emphasis placed on public buildings (e.g. Local Authorities), aiming at reducing energy consumption in the urban environment.
- ✓ Horizontal actions supporting the promotion of RES and energy saving technology applications, as well as implementation of actions for the raising of awareness and mobilisation of citizens, local government, companies and agencies.
- Actions for the rational management of natural resources, with projects pertaining to:
 - ✓ Special actions promoting issues concerning the development of the hydrocarbon sector,
 - ✓ Underwater geological and mineral deposits research,
 - ✓ Utilisation of the country's non-energy mineral raw materials,
 - ✓ Assessment of the geothermal energy potential
 - ✓ Horizontal actions, mainly for the creation of large scale geo-spatial infrastructure that generally contribute to the rational exploitation of the country's energy and mineral raw materials.

Through the use of the flexibility clause, it will be possible to implement education and training actions that fall within the framework of the main indicative interventions funded by the Priority Axis.

Beneficiaries, implementation issues

The interventions in Priority Axis 4 refer exclusively to the Energy sector.

The beneficiaries of the Axis' actions will be:

- ✓ Enterprises of any type and size, as well as Greek households in the new areas of expansion of natural gas networks.
- ✓ Enterprises carrying out energy saving and energy efficiency improvement investments.
- ✓ Enterprises producing energy from RES and high-efficiency CHP, etc.
- ✓ Natural persons – homeowners that meet specific eligibility criteria (e.g. property, income, etc.)
- ✓ 1st Grade Local Authorities
- ✓ Public / State enterprises
- ✓ The country's insular regions.

Beneficiaries from the Axis' interventions in a wider sense will also include the public at large,

through the above mentioned actions supporting energy market deregulation and the country's integration in the large international electricity and natural gas transmission networks, the completion, modernization and securing of the country's power network adequacy, the expansion of the natural gas transport network, the increase of the current natural gas storage capacity, the upgrading of the service lines capability of the natural gas system towards the entire country, increasing the adequacy of the energy system, the utilisation of Renewable Energy Sources (RES), saving energy, the protection of the environment and the rational management of natural resources.

In the implementation of the actions of the Axis, the provisions of the Joint Ministerial Decision on the approval of the Strategic Environmental Impact Study (SEIS) of the "Competitiveness and Entrepreneurship" Operational Programme of the 2007-2013 Programming Period are taken into consideration.

State aid

The following are taken into consideration in the implementation of the actions:

- The Community Framework on State aid for the protection of the environment
- The Guidelines on Regional State Aid 2007-2013
- Approved investments within the framework of Investment Law 3299/2004
- The Commission Regulation (EC) 1628/2006 of 24 October 2006 on the application of Articles 87 and 88 of the Treaty to regional investment aid

In cases of state aid actions that do not fall within the scope of Commission Regulations (EC) No 1998/2006 and (EC) No 800/2008, the DG Competition will be notified accordingly

P.A.5: TECHNICAL SUPPORT OF THE PROGRAMME'S IMPLEMENTATION (ERDF)

The Priority Axis pursues the effective organization and operation of the preparation, management, monitoring, evaluation and control of the Operational Programme, the promotion and dissemination of its actions, the reinforcement of administrative capacity for their implementation, including the operating expenses of the MA, as well as the design and maturation and actions of the 2014-2020 Programming Period..

The EU contribution in this Priority Axis amounts to approximately 4% of the Programme's overall EU contribution.

3.2. SPECIAL SUBJECTS

3.2.1. Development Poles, as a means to promote the Lisbon Strategy

1. The importance of towns for the promotion of the Lisbon Strategy

European Strategic Guidelines on Cohesion Policy during the new programming period attribute a particular importance to **the contribution of towns** (urban centres) to development and employment.

The great importance attributed to towns is linked to the recognition of their role as **development vectors** in the areas located in their direct sphere of influence, the surrounding countryside, as well as the smaller urban centres falling within their range of influence. Consequently, the development of urban centres can also operate as a mechanism promoting true convergence.

The NSRF attributes a particular importance to urban development, aiming at the structuring of a global yet specialized development policy with particular emphasis on the upgrading of towns and on their contribution to the promotion of the **Lisbon Strategy**.

At the same time, the objectives of the **Cohesion Policy** are realized through the spread of development in the wider areas touched by the momentum of urban centres, contributing in this way also to the reduction of intra-regional disparities and, more generally, to a balanced development.

2. Development poles in the strategy of the NSRF and of Operational Programmes in the period 2007-2013.

2.1 The concept of development poles

Given the above and with a view to strengthening economic growth and employment in the country's Regions, the implementation of poles as a territorial development tool constitutes an important innovative element of the strategy of the NSRF and of the Operational Programmes in the new programming period.

Potential **development poles** are the country's particularly dynamic urban centres⁵⁶ of metropolitan and regional importance, which – through interactions and influences exercised on the country, on regions and on their functional or daily urban systems – are expected to contribute to the country's economic growth, with emphasis on the creation of a dynamic business environment of research and technology, innovation and better jobs, within the framework of the implementation of the Lisbon strategy .

2.2 Field of implementation

⁵⁶ As defined by the National Statistical Service – ESYE (main settlement population in excess of 10,000 inhabitants); centres with a smaller population that are prefectural capitals are additionally included.

Within the framework of the implementation of the NSRF development strategy, during the next programming period **all the towns will play hosts to development actions** through sectoral and regional programmes, financed by the Structural Funds.

The specific interventions on development poles will focus on **four main interlinked fields**, according to the priorities set at the 2006 Spring European Council, i.e.: Research and Technological Development, Innovation, Entrepreneurship and Employability.

These fields are fully compatible with the Integrated Guidelines on Development and Employment and constitute the cornerstone of the revised **Lisbon Strategy**.

According to the above, **interventions on development poles** will target:

- The creation and transfer of innovation.
- The promotion of Research and Technological Development and its linking with the production process.
- The development of entrepreneurship and its orientation onto new innovative activities.
- The development and promotion of ITC and of quality public services to citizens and enterprises.
- The creation and development of Centres of Excellence for education, training and employment.

The above mentioned interventions will be financed by both the Sectoral Operational Programmes (Competitiveness and Entrepreneurship, Digital Convergence, Development of Human Resources, Education and life-long learning, Enhancement of the administrative capacity of Public administration) and the Regional Operational Programmes (ROP).

3. Process of operational specialization of the strategy of development poles – Time schedule

The determination of development poles and the specialization of the strategy at the level of Operational Programmes must be completed by the **end of 2008**. The participation and involvement of the local society in the definition and structuring of the implementation framework of development poles is deemed of crucial importance.

To this end, **the next steps** within the framework of the process are as follows:

- 1) During the second half of 2007 **consultation meetings** will be held **in each of the** country's 13 Regions, with the participation of local stakeholders (regions, local authorities, chambers, enterprises, professional associations, higher education and research institutes etc). The objective is an in-depth consultation with the above agencies on the operational framework of the development poles strategy.

- 2) Following the completion of the local meetings, **a consultation conference** will be held **at national level**, with the participation of socio-economic partners, with a view to finalizing the conclusions of the 13 regional consultation meetings in relation to the operational framework of the development poles strategy.
- 3) Starting in April 2008, the first **invitation to submit proposals** will be launched.

These proposals will include integrated plans focusing on development and employment through interventions in the fields mentioned under paragraph 2.2 of this document. They can be submitted by associations or joint-ventures of agencies related to/active in the above fields and located in the **country's prefectural capitals or important urban centres**. The selection of the integrated development plans for development and employment within the first invitation (2008) will be completed by the end of 2008. The next invitation will be carried out after the evaluation of the results and experiences of the first cycle.

3.2.2. Spatial dimension of the Operational Programme's strategy

The strategy of the Operational Programme is based on the analysis of the overall weaknesses – strengths and threats – opportunities for the country's competitiveness, as a specialization of the global development strategy that will be implemented through the NSRF 2007-2013. At the same time, as analysed in chapter 1.2.8 "Competitiveness and regional dimension":

- ✓ The main volume and core of the Greek business sector (with the exception of tourism) as well as of the research system, that is the regions of Attica and (secondarily) Central Macedonia⁵⁷ are placed outside the field of intervention of the Operational Programme Competitiveness and Entrepreneurship.
- ✓ In the Greek regions there is no direct correlation between the rate of development and the intensity of R&T or employment in high technology and knowledge-intensive sectors, and the increase in productivity seems to have ensued from the modernization of the production structure rather than from the development of innovation or differentiation. As a result, the Greek strategy for competitiveness – extroversion – entrepreneurship must be regionally targeted so as to avoid creating interregional disparities when in Greece the most important disparities appear at an intra-regional level.
- ✓ In view of the above, advantage was taken of the long planning period of the NSRF and the Operational Programmes in order to ensure the greatest possible convergence

⁵⁷ 50% of the secondary sector in Greece is located in Attica and Central Macedonia, these two regions together with Attica's neighbouring region of Sterea Ellada accounting for 63% of the sector. The tertiary sector accounts for "only" 50% in Attica and Central Macedonia. The five "transitional support" regions account for 69% of the secondary and 70% of the tertiary sector of the Greek economy. On the basis of the spatial distribution of O.P. Competitiveness 2000-2006 expenditure, the "transitional support" regions received 67% of expenditure made for industry, 76% for RTD and 60% for trade.

between the strategy for competitiveness included in the Operational Programme Competitiveness and Entrepreneurship and the strategies of the “transitional support” regions and, mainly, the parallel structuring of its strategy with the strategy of the “Pure convergence” regions.

The review of ROPs during the consultation process for the finalization of the NSRF showed significant differences in the development course and the competitiveness of Greek regions:

- ✓ The Southern Aegean and Crete are better placed, having tourism as their main boosting factor; Attica is also well placed since its economy, in view of the high concentration, scale and range of production and administrative activities it records, renders it a potential pivotal node in the eastern Mediterranean.
- ✓ The Peloponnese is also in a significantly improved position; its economy seems to be seamlessly changing its traditional orientation on the primary sector and to be rising to the challenges of international competition.
- ✓ The image of Sterea Ellada and, to a lesser extent, of Western Macedonia is not directly linked to their endogenous development dynamics but ensues from special conditions (proximity to the capital and PPC activities respectively) which in part distort upwards their performance in terms of GDP per capita without any corresponding positive impact on the labour market.
- ✓ Also Central Macedonia fulfills, in terms of concentration and scale of production and business activities, the necessary conditions to be a protagonist in economic developments, particularly centred in SE Europe. However, the modest development performance it records, particularly in the labour market, is due to the intense disruption in its productive fabric caused by the intensifying competition as well as to the deficit in modern production and technical infrastructures that should promote the metropolitan role of Thessaloniki.
- ✓ The remaining Regions are not all on the same level but are incorporated in the same category as they do not record satisfactory endogenous development dynamics: Western Greece, Thessaly, Eastern Macedonia-Thrace, the Ionian islands, the Northern Aegean and Epirus, although the latter has recorded major progress, constitute the regions with the highest development deficit in Greece. It should however be noted that in some of these regions, such as the Northern Aegean and the Ionian Islands, the role of tourism acquires an increasing importance and new fields of production, capable of replacing those that are by now stagnating because of competition, have yet to appear.

The main core of the strengths, weaknesses, opportunities and threats is common. Specifically:

STRENGTHS

1. High growth rates

2. Progress in the completion and modernization of infrastructures
3. Positive development of own capital yield and expansion of self-financing
4. Increase of investment activity
5. Significant activity in the tertiary sector
6. Noteworthy/famous natural and historical/cultural tourist resources
7. High contribution of tourism in the GDP and in the creation of jobs
8. Significant potential in Renewable Sources of energy and cogeneration
9. Increasing penetration of natural gas

WEAKNESSES

1. Low export rate of goods and services as a percentage of GDP
2. Duality in business structuring, very small size of enterprises
3. Low rate of attraction of foreign direct investments
4. Shortage of infrastructures supporting business activities, too many formalities
5. Failure of SMEs to incorporate know-how and develop high added value products
6. Limited range of sectoral specialization and low share of technology-intensive products/failure to create production networks
7. Insufficient links between education and entrepreneurship
8. Shortage of infrastructures supporting the supply chain
9. Low exploitation of ICT by a large share of businesses, low level of R&T expenditures as a percentage of GDP, low participation of the private sector
10. High energy intensity
11. Shortage in modern ICT infrastructures (broadband networks)
12. Low performance in life-long education
13. Small size of tourism enterprises
14. Dominant paradigm is the summer seaside tourism – small participation of new forms of tourism

15. Lack of organization in the tourism business fabric, low rate of networking between enterprises and of interconnection with other sectors
16. Insufficient tourism infrastructure – Limited extension of tourism period, high seasonality, high concentration
17. Low rate of penetration of Renewable Sources of Energy in the energy system.

THREATS

1. EU enlargement and accession of new members with low labour cost, high productivity and competitiveness
2. Capital outflow to other countries, shrinking of processing due to relocation in low cost countries
3. Micro-enterprises and SMEs highly sensitive to competition
4. Acquisitions of Greek enterprises
5. Increased leakage of high level scientific human resources.
6. Rapid development of technology making R&T infrastructure obsolete
7. Fierce competition in manufacturing/processing from neighbouring countries and new member states impacting on the possibilities to develop RTD
8. Oligopsony tourism structure with few tour operators
9. Strengthening of special forms of tourism and infrastructures in competitor countries

OPPORTUNITIES

1. Increasing trend towards more qualitative products and services
2. Strengthening of demand in neighbouring countries
3. Expansion of cooperation and networking
4. Consolidation / recognition of the country as a safe and attractive tourism destination
5. Continuous tourism product demand
6. Increasing demand for special / thematic forms of tourism
7. Upgrading of the country's energy-related role in SE Europe (node), development of oil sector in SE Europe
8. Deregulation of energy market as an incentive for private investment

For this very reason, the strategies aimed at achieving the NSRF development objectives for the regions, in terms of competitiveness and entrepreneurship, converge with the strategy of the Operational Programme Competitiveness and Entrepreneurship:

- √ For the spatial unit Macedonia-Thrace, the development vision is focused on the creation of a viable competitive regional economy, with strong extrovert orientation and internal economic, social, spatial and administrative cohesion, with emphasis on the support to innovative entrepreneurship, so as to develop competitive enterprises and give a significant boosting to employment growth. In Central Macedonia, both in order to face challenges and to take advantage of opportunities in the framework of a knowledge-based economy, the development of a regional strategy on innovation and competitiveness was adopted with a view to transform it into a region of innovation, balanced and sustainable development, by providing support services to enterprises for the upgrading of the added value generated, particularly in sectors already hit by international competition, strengthening the regional fabric of scientific, business and innovation structures (Eastern Thessaloniki Innovation Zone, Central Macedonia Innovation Pole, system of incubators, spin-off companies, technology enterprises clusters), promotion of the use of ICT and provision of digital services to enterprises. In Western Macedonia emphasis is laid on increasing the added value in the energy sector by improving its interconnection with the local production system and differentiating – enriching the production structure through the adoption of innovation and the boosting of competitiveness of business activities. In Eastern Macedonia – Thrace, particular importance will be given to attracting new investments targeting neighbouring markets, multi-modal transports and the creation of broad-band or wireless networks in the tourist poles.
- √ In the spatial unit Peloponnese, Western Greece and Ionian islands the efforts are turned to accelerating the rate of economic growth and social development and the increase of productivity, with two (out of three) priorities being the region's attractiveness as a place for investment, work and residence and the investment in the production sector of the economy. Western Greece focuses on developing and accelerating the completion of infrastructures yet at the same time it lays emphasis on the increase of investments in knowledge-intensive sectors and on the orientation of the production capacity towards high added value goods and services, by promoting and strengthening the cooperation between universities (AEI), technical education institutes (TEI), research institutes and enterprises, founding of new and modernization of extant enterprises with emphasis on innovation and new technologies and creating innovating products with the valorisation of the region's educational institutes. In the region of the Peloponnese particular importance will be given to the integration of new technologies in the production process and the application of innovations. The region of the Ionian islands will focus on upgrading the quality and on the differentiation of its tourism product in combination with the widening of the production base in the secondary sector.
- √ In the spatial unit Thessaly, Sterea Ellada, Epirus, the emphasis is placed on the strengthening of the economy's competitiveness, attractiveness and extroversion and

improvement of the spatial and social cohesion and adoption of sustainable methods of development of productive activities and management of the natural and man-made environment, with investments in knowledge, quality, innovation and networks playing the major role. The region of Thessaly will focus on creating an innovative environment that will strengthen the region's competitiveness and entrepreneurship by promoting cooperation between educational institutions and production agencies. The region of Sterea Ellada will promote the restructuring of the production fabric towards higher added value sectors, branches and services, which incorporate the developments in technological progress and innovation in a way to ensure a high level of synergy between the three sectors of production, the primary sector in the plains and the mild and special forms of tourism in the mountain hinterland and in Euboea. Furthermore, its strategy will focus on the strengthening of the local research resources and the attraction of researchers from abroad and the promotion of research agencies and enterprises participation in joint actions with other EU countries. In the region of Epirus, the main pursuit will be the completion of transport infrastructures (Egnatia odos and development of links) and transshipment infrastructures, whilst also promoting the innovative capacity and business competitiveness by enhancing research in the creation of new products and further valorising the higher education institutes, as well as environmental management.

- √ In the spatial unit Crete and Aegean islands the emphasis is placed on the strengthening of competitiveness and the enhancement of the spatial unit's attractiveness, under conditions of sustainable development, and of innovative entrepreneurship, with parallel reinforcement of extrovert cooperation and attraction of high added value investments. In Crete, the main objective is the upgrading of its role in the wider area of the SE Mediterranean on the basis of the competitiveness of its economy, but also the highlighting of the region as a pilot centre for the transfer of technology and know-how on RES and energy saving applications. The region of the Southern Aegean will focus on improving accessibility and strengthening competitiveness placing at the same time emphasis on the quality of the tourist and cultural product as well as on the integration of innovation within the country's production fabric as a development factor. The region of the Northern Aegean will focus on improving the interconnection between the islands and the country's mainland and will also place emphasis on strengthening viable entrepreneurship in activities complementary to tourism and in the agricultural sector, whilst also pursuing the installation and use of new information and communication technologies.
- √ For the spatial unit of Attica, the vision consists in strengthening its international role, as a European metropolis in the area of south-eastern Europe and the Mediterranean, trying to establish it as an international business centre, improving the extroversion of the production system and facilitating the attraction of foreign investments by encouraging innovation, entrepreneurship, research and technology and the dissemination and exploitation of new technologies.

On the basis of the common needs and of the regional differences, the strategy of the Operational Programme Competitiveness and Entrepreneurship acquires a spatial definition through the following provisions it makes:

The allocation of the funds of the Operational Programme to the eight “Convergence” regions (with the exception of specific interventions usually related to “Large Projects” in the energy sector) follows to a great extent a bottom-up approach given that it is demand-driven (determined by needs). However, on the basis of (a) the strategic objectives of each region, as recorded in the relevant ROP, (b) the cooperation with the Regions and (c) the participation of the eight regions in the OP Competitiveness 2000-2006, it was possible to set up the following indicative allocation of all funds necessary to competitiveness/entrepreneurship by region and by Priority Axis of the Operational Programme’s strategy that records the relation of its strategy with the needs / possibilities of the regions:

In particular:

Priority Axis 1: 60% of funds in the Axis is allocated to 3 regions: Crete, Western Greece and Thessaly. In view of the presence of higher educational institutes (AEI), research centres (of excellence in some cases) and other R&T infrastructures and high technology companies, there are the conditions for further implementation of RTD and Innovation actions and promotion of the transition to a knowledge-based society.

Priority Axis 2: The funds of the Axis are better distributed over the 8 regions (60% of funds to 4 regions) reflecting the adoption of a strategy that aims at the overall strengthening of entrepreneurship, extroversion and upgrading towards high added value products and services.

Priority Axis 3: 38% of funds in the Axis is allocated to the regions of Western Greece and Crete, where significant interventions for the upgrading of tourism infrastructure, differentiation of tourism products and culture are provided for.

Priority Axis 4: This is the most highly focused Axis as the greatest part of funds is allocated to the regions: Thessaly, the Peloponnese and Eastern Macedonia – Thrace, where provision has been made for the construction of large energy projects such as: Installation of the Compression Station in N. Mesimvria, B’ Upgrading of LNG Terminal Station in Revithoussa (3rd LNG Tank), High Pressure Natural Gas Pipeline Agii Theodori – Megalopoli, etc., the Patras High Voltage Centre and the Eastern Macedonia-Thrace Natural Gas Company (EPA). In the remaining regions, provision is mainly made for RES and energy saving projects, as well as projects within the framework of the completion and modernization of the country’s power grid and the extension of the natural gas transmission system.

At the level of Regions:

Eastern Macedonia - Thrace: With a view to transforming the Region into a transit, energy and business and scientific know-how centre in the wider area, emphasis is

placed on Priority Axis 2 (Interconnection with international integrated products and services production systems, establishment of cooperation between Greek and international enterprises, trade and accompanying services, Industry – Trade – Services networking, etc.) and on Priority Axis 4 with the energy projects, as already mentioned.

Thessaly: In order to reach the objective of the improvement of competitiveness, strengthening of entrepreneurship, innovation and networking, emphasis is given on Priority Axis 1 (presence of higher education institutes (AEI), research centres, high technology companies) and on Priority Axis 2 (re-orientation of the processing activity towards sectors and products with higher added value, interconnection with international integrated products and services production systems, upgrading necessity entrepreneurship to high capacity entrepreneurship etc.)

Epirus: The objectives of innovative entrepreneurship and of the strengthening of research in combination with the operation of higher education institutes (AEI) and research institutes in the region, foreseen within the fourth Programming Period 2007-2013, define the region's strategic priorities on Priority Axis 2, 1 and 4.

Western Greece: the achievement of the region's development goals presupposes strong interventions on all Priority Axes. Priority Axis 1 will contribute to valorising and upgrading the R&T fabric and the knowledge-intensive entrepreneurship, Priority Axes 2 and 3 to the re-orientation towards products and services with high added value, and Priority Axis 4 supports the implementation of projects for the promotion of RES penetration/energy saving.

Peloponnese: The strengthening of entrepreneurship and extroversion and the further promotion of RES/ Energy Saving in the region are the main strategic goals of the Operational Programme for the Region.

Ionian islands: Emphasis is placed on the improvement and differentiation of the tourist product and relevant entrepreneurship (Priority Axes 2 and 3).

Crete: The important scientific/technological resources, tourism infrastructures, cultural wealth and pursued upgrading of the region's role in the SE Mediterranean shape a strategy through the specific objectives of Priority Axes 1, 2 and 3: Knowledge-based economy, Infrastructures and Entrepreneurship in the sectors of Tourism – Culture, promotion of RES penetration/ Energy Saving.

Northern Aegean: The pursued strengthening of extroversion is mainly achieved through the specific objectives of Priority Axes 2 and 3.

Synergy with the interventions of Transitional Support Regions

Particularly in the case of the five transitional support regions, the planned “competitiveness and entrepreneurship” interventions interact with the Operational Programme “Competitiveness and Entrepreneurship” and act in a complementary way as to ROP intervention of similar nature. The total funds are estimated to be about 1500 million €.

In Attica, within the framework of the general strategy that focuses on the «establishment of the region as an international business centre, improving the extroversion of the local production system and facilitating the attraction of foreign investments by encouraging innovation, entrepreneurship, research and technology and the dissemination and exploitation of new technologies» the emphasis is placed on interventions strengthening entrepreneurship and extroversion and promoting research, technology and innovation. At the same time, in view of the region's particular importance for the development of the country, the other development priorities also receive a considerable support. According to the analysis of the existing situation, the region concentrates the largest volume of RTD activities as well as business activity in the country. Within this framework, the largest share of funds is allocated to RTD interventions (Axis 1 and part of Axis 3), while a smaller yet just as important share is allocated to actions for the direct strengthening of entrepreneurship (respectively Axis 2 of the Operational Programme) with significant interventions in all the main fields and individual priorities. This is followed by the upgrading of the business environment (emphasis on business and tourism infrastructure and promotion of financial instruments) and the energy sector within the framework of which an important role is held by the interventions aimed at strengthening supply security in the country's southern system and increasing the margin of voltage stability in parallel with the promotion of RES use/ Energy Saving.

In Central Macedonia, compatible with the central strategic choice for «the development of a regional strategy on innovation and competitiveness with a view to transforming it into a region of innovation, balanced and sustainable development» the largest share of funds is earmarked for RTD actions. In the energy sector, that holds a smaller yet high share, the most important interventions focus on the promotion of the penetration of natural gas and the promotion of Renewable Energy Sources and Energy Saving. Provisions have also been made for actions strengthening the business environment (industry and tourism infrastructures, promotion of financial instruments) as well as entrepreneurship and extroversion.

In Sterea Ellada – a region which in view of its proximity with Attica, gathers a large number of manufacturing/processing units – compatible with the promotion of «restructuring of the production fabric towards higher added value sectors, branches and services.....» the largest share of programmed funds is related to actions for the promotion of entrepreneurship with a view to upgrading the production fabric towards high added value goods and services (Axis 2 of the Operational Programme Competitiveness and Entrepreneurship). In the energy sector, provision has been made for significant interventions pertaining to the promotion of the penetration of natural gas and the promotion of Energy Saving. To a lesser extent, support is given to actions for the upgrading of the business environment (emphasis on tourism and industrial infrastructures) and RTD actions.

In Western Macedonia the relatively higher amounts are destined to actions for the upgrading of the business environment (with emphasis on tourism infrastructures), promotion of entrepreneurship and penetration of Renewable Energy Sources/ Energy Saving.

In the Southern Aegean, an important place is held by interventions in the tourism sector (in

absolute compatibility with the extant situation) as well as the important intervention in the energy sector pertaining to the interconnection of the Cyclades, a project of major importance for their future supply in view of the high rate of load increase and of the limited possibilities for the installation of a new local production unit on the islands for environmental reasons.

The spatial and sectoral specialization of the Programme

The Programme aims at implementing horizontal actions pertaining to its fields of intervention that can be implemented over the entire territory of the country and are open to the participation of beneficiaries from all the Regions.

In spite of the fact that the starting point, the needs and priorities of regions differ, the O.P. offers the same possibilities to all regions to benefit from it. Thus, it offers the possibility to able and active agencies - and, by extension, to the corresponding regions - to maximize the benefits they draw from the OP Competitiveness and Entrepreneurship interventions, whilst supporting the less «strong» potential beneficiaries to exploit the opportunities offered to them.

This process is expected to be considerably influenced by the existing trends for the concentration of some intervention in some regions, e.g. RTD in Attica and Macedonia where there is a good starting basis and infrastructures, business receptors in industrial activity concentration areas in Attica, Sterea Ellada and Central Macedonia, support to special investments in tourism in Crete, Southern Aegean and the Ionian Islands.

In view of the above, it is not deemed necessary, nor is fully possible to proceed from scratch to a detailed spatial and sectoral specialization of the Programme. The question is to ensure during implementation the compatibility of actions with changing needs in relation to the spatial and sectoral dimension.

In order to have a better match between development interventions and the needs of regions, taking into account their particular features – particularly when they constitute a crucial factor for their development – and the maximization of anticipated results and benefits, the specialization of actions will factor in individual criteria of spatial and sectoral dimension on the basis of the findings of a study elaborated to this end (see relevant reference in Section 1.2.3). The results of the study will be used in particular in the detailed definition of the branch and sector specialization by region, and in the selection criteria for interventions, actions and indicator-targets.

3.2.3. Large Projects

The list of Large Projects is indicative and includes projects with an overall budget in excess of 50 million €.

TABLE 35: INDICATIVE LIST OF LARGE PROJECTS PURELY UNDER THE “ENTREPRENEURSHIP AND COMPETITIVENESS” PROGRAMME

PROJECT	ESTIMATED TOTAL BUDGET	OBJECT	ESTIMATED DURATION OF IMPLEMENTATION
Ag. Theodori – Megalopolis High Pressure Natural Gas Pipeline	94.99 M. €	This project concerns the construction of a pipeline that will supply power generation plants to be constructed in Megalopolis fueled by natural gas, as well as the broader cottage industry/urban areas that the pipeline goes through	2009-2015
State Aid through the Investment Law 3299/2004 at the company HELLAS HOLIDAY HOTELS S.A.(DAIOS COVE)	55.05 M. €	It concerns the construction of a 5-star hotel accommodation, with 300 rooms and 717 beds in Aghios Nikolaos, Lasithi, Crete	2007-2010
State Aid through the Investment Law 3299/2004 at the company HELIOSPHERA S.A. (ex NEXT SOLAR)- Plant of photovoltaic equipment production and exploitation of energy SA	169.04 M. €	It concerns the construction of a plant for the production of photovoltaic panels in Arcadia in the Peloponnese (in the industrial area of Tripoli)	2008-2010

TABLE 36: INDICATIVE LIST OF LARGE PROJECTS UNDER THE ‘COMPETITIVENESS AND ENTREPRENEURSHIP’ OPERATIONAL PROGRAMME AND/OR A ROP

	ESTIMATED TOTAL BUDGET	OBJECT	LOCATION	ESTIMATED DURATION OF IMPLEMENTATION
Interconnection of the Cyclades (A' phase)	247.36 M. €	The whole project concerns the interconnection of the islands of Syros, Paros, Naxos, Tinos and Mykonos with the country's mainland system, with the possibility of future expansion towards Milos for utilising its geothermal potential. In accordance with the revised designing, the Phase A involves firstly the connection of Syros to Lavrio, as well as the connection with the islands of Paros, Mykonos and Tinos. The second phase includes the completion of the loop, connecting the Naxos to Paros and to Mykonos. The Phase C includes the second connection of Syros to Lavrio, ensuring complete and reliable supply of Cyclades.	ΕΠΑΕ, Attica, Central Macedonia, Western Macedonia, Continental Greece, Southern Aegean	2014-2017*
Installation of N. Messimvria Compression Station	57.41 M. €	This concerns the installation of a natural gas compression station in the central pipeline of the Northern Transport System.	Peloponnesus, Thessaly, Eastern Macedonia-Thrace, Attica, Central Macedonia, Cont. Greece	2008-2014
High Pressure Natural Gas Pipeline to Aliveri	36.64 M. €	This project concerns the expansion of the high pressure NG transport network to Aliveri and, specifically, from the central pipeline at Oinophyta, Attica, to the DEI [PPC] station.	Attica, Continental Greece	2007-2015
Upgrading of LNG Terminal station at Revithoussa-CHP	7.77 M. €	Bridge-project from the 3 rd CSF 2000-2006. This concerns the upgrading of the Liquefied Natural Gas (LNG) Terminal Station, increasing its offloading and discharge potential, including the necessary expansion/installation of engineering equipment and the installation of a Combined Heat and Power (CHP) Station that will cover the energy needs of the LNG Terminal Station.	Peloponnesus, Thessaly, Eastern Macedonia – Thrace, Attica, Central Macedonia, Cont. Greece	2008-2014
2 nd Upgrading of LNG Terminal station at Revithoussa (3 rd Tank)	157.94 M. €	This concerns the construction of a new Liquefied Natural Gas (LNG) tank at Revithoussa, Attica, in order to increase the storage capacity and the discharge supply capability of the NNGS..	Peloponnesus, Thessaly, Eastern Macedonia – Thrace, Attica, C. Macedonia, Cont. Greece	2009-2015*

* Possible division of the project shall be examined between current and next programming period

The allocation of the Budget of Large Projects located in more than one region is carried out on the basis of ad hoc criteria for each project and on the basis of allocation keys based on transparent and reasonable criteria for each case and according to the nature and type of the projects.

3.2.4. Horizontal projects

The Operational Programme “Competitiveness and Entrepreneurship” includes the implementation of actions, projects and/or project groups such as:

- Improvement of the business environment and of support structures, infrastructures and tools for the development of entrepreneurship (e.g. National System for Market Supervision, National Observatory for SMEs – Commerce, Studies on simplifying the business environment, consumer support actions, etc.)
- Completion of the energy system (e.g. support of the deregulation of the energy market, promotion of Energy Saving – rational energy use and Renewable Energy Sources, etc.)
- National actions to support and promote Research, Technology and Innovation
- Technical Support of Implementation

which, due to their horizontal nature, are implemented on a national scale and their results are spread throughout all the regions.

The allocation of expenditures of these horizontal actions in EPAN II and the Operational Programmes of the Transitional Support Regions is carried out:

a) in proportion (pro rata) to the share of resources allocated indicatively to each Region within the framework of the current Programming Period, according to the decisions of the European Council of 2005. The allocation scheme is presented in Annex 3.

b) by means of allocation keys based on clear and reasonable criteria for each case, according to the nature and type of the actions and the expected results in the corresponding Regions.

3.3 QUANTIFICATION OF OBJECTIVES

The Programme's implementation pursues the achievement of quantitative objectives pertaining both to outputs and to its development results. Furthermore, being the main NSRF tool in two of its Thematic Priorities, the Programme must contribute to a favourable modification of the external environment, i.e. to the improvement of those indicators recording the overall competitiveness deficit of the Greek economy.

The tables below present the targets set by the O.P. Competitiveness and Entrepreneurship. The baseline value for all indicators is the value they recorded at the end of the 3rd CSF.

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

CODE	INDICATOR	UNIT OF MEASUREMENT	SOURCE	BASELINE VALUE*	TARGET VALUE 2013**	INDICATOR DEFINITION-COMMENTS
CORE INDICATORS						
P.A. 1 GENERATION AND UTILISATION OF INNOVATION SUPPORTED BY RESEARCH AND TECHNOLOGICAL DEVELOPMENT						
4	Number of RTD projects	Number	MIN. OF DEVELOPMENT / GSRT	2.276	250	The baseline value concerns the assessment of research projects/sub-projects completed in 2008 within the framework of EPAN in the 13 regions
5	Number of cooperation project enterprises - research laboratories	Number	MIN. OF DEVELOPMENT / GSRT	0	70	Agencies from different regions can participate in such a cooperation project. The value of the indicator for each participant corresponds to the party on the basis of the budget. The action "R&D Vouchers for SMEs" does not contribute to the indicator, as it has been initially regarded.
6	Research jobs created	Number	MIN. OF DEVELOPMENT / GSRT	0	928	Gross jobs (for the RTD sector). Corresponds to full-time employment equivalents, also during the project implementation.

* The baseline value concerns the 13 regions

**The Target value concerns the 'net' target for the 8 Regions of objective 1

S/N	INDICATOR	UNIT OF MEASUREMENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
OUTPUT INDICATORS						
P.A. 1 GENERATION AND UTILISATION OF INNOVATION SUPPORTED BY RESEARCH AND TECHNOLOGICAL DEVELOPMENT						
1	Number of enterprises participating in research laboratories & enterprises cooperation projects	Number	MIN. OF DEVELOPMENT GSRT	0	120	
2	Number of enterprises benefiting from Research and Innovation Development actions	Number	MIN. OF DEVELOPMENT GSRT	121	470	(Net target 349)
3	Number of new knowledge-intensive clusters created	Number	MIN. OF DEVELOPMENT GSRT	0	2	
4	Number of SMEs benefiting from the provision of Research, Technology and	Number	MIN. OF DEVELOPMENT	0	145	

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
	Innovation Development services		GSRT			
5	Number of new/supported knowledge-intensive enterprises (spin-off and spin-out)	Number	MIN. OF DEVELOPMENT, GSRT	4	11	(Net target 7)
6	Number of joint projects with R&T agencies from other countries(with or without coordination with the EU)	Number	MIN. OF DEVELOPMENT, GSRT	0	70	

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE	INDICATOR DEFINITION-COMMENTS
RESULT INDICATORS						
P.A. 1 GENERATION AND UTILISATION OF INNOVATION SUPPORTED BY RESEARCH AND TECHNOLOGICAL DEVELOPMENT						
1	Number of patent applications filled by researchers	Number	MIN. OF DEVELOPMENT, GSRT	0	80	
2	Mobilization of private funds	M. €	MIN. OF DEVELOPMENT, GSRT	0	25	

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

CODE	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE* (2008, end 3rd CSF)	TARGET VALUE**	INDICATOR DEFINITION-COMMENTS
CORE INDICATORS						
P.A.2 STRENGTHENING ENTREPRENEURSHIP AND EXTROVERSION						
7	Number of direct investment aid projects to SMEs	Number	MIN. OF DEVELOPMENT	10,670	2,200	The baseline value refers to the end of 2006 and pertains to the number of sub-projects completed within the framework of EPAN in the 13 regions The indicator is also used by P.A. 3 and 4
8	Number of start-ups supported	Number	MIN. OF DEVELOPMENT	1,800	1,200	Number of projects (Direct support of investments in SMEs) of which: number of start-ups supported The baseline value refers to the end of 2006 and pertains to the number of sub-projects completed within the framework of EPAN in the 13 regions
9	Jobs created (gross, full time equivalent)	Number	MIN. OF DEVELOPMENT	0	4,200	Number of jobs created (gross, equivalent full-time employment positions) by Direct Support through Investments in SMEs
10	Investment Induced (million €)	Million €	MIN. OF DEVELOPMENT	0	1,704	This concerns the total Public and Private Expenditure of the Axis (in M. €).The indicator is also used by P.A. 3 and 4.

* The baseline value concerns the 13 regions

**The Target value concerns the 'net' target for the 8 Regions of objective 1

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE* (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
OUTPUT INDICATORS						
P.A.2 STRENGTHENING ENTREPRENEURSHIP AND EXTROVERSION						
1	Number of existing enterprises undergoing modernization / upgrading – General Secretariat for Industry, Commerce, Tourism -	Αριθμός	ΥΠΑΝ	0	1,100	
2	Number of existing SMEs undergoing modernization / upgrading	Number	MIN. OF DEVELOPMENT	0	1,000	

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE* (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
3	Number of enterprises created from subsidized programmes	Number	MIN. OF DEVELOPMENT	795	1,995	H The baseline value refers to the end of 2006 and pertains to the number of enterprises created by the OP Competitiveness (Net target 1,200)
4	Number of tourist beds undergoing modernization	Number	MIN. OF DEVELOPMENT	0	18,650	
5	Number of new tourist beds	Number	MIN. OF DEVELOPMENT	0	10,900	
6	Number of investment plans in special forms of tourism	Number	MIN. OF DEVELOPMENT	18	170	(Net target 152)
7	Number of tourism investment plans	Number	MIN. OF DEVELOPMENT	0	450	

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE	INDICATOR DEFINITION-COMMENTS
RESULT INDICATORS						
P.A.2 STRENGTHENING ENTREPRENEURSHIP AND EXTROVERSION						
1	Percentage of tourist beds undergoing modernization	%	NATIONAL STATISTICAL SERVICE, MIN. OF DEVELOPMENT, MI. OF TOURISM DEVELOPMENT	351,149	5.3%	
2	Mobilization of private funds	Million €	MIN. OF DEVELOPMENT	0	932	

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE**	INDICATOR DEFINITION-COMMENTS
CORE INDICATORS						
P.A.3 IMPROVING THE BUSINESS ENVIRONMENT						
7	Number of direct investment aid projects to SMEs	Number	MIN. OF DEVELOPMENT	0	4,000	It concerns the enterprises that will use the financial instruments. The indicator is also used in P.A. 2
10	Investment induced million €)	Million €	MIN. OF DEVELOPMENT	0	480	It concerns the projects of the axis with private expenditure (total Public and Private Expenditure of them) The indicator is also used in P.A. 2
34	Number of Tourism Projects	Number	MIN. OF DEVELOPMENT	3,545*	35	The target only concerns the infrastructure projects of the tourism sector
35	Number of jobs created in tourism	Number	MIN. OF DEVELOPMENT	0	135	The jobs created by the infrastructure projects in the Tourism sector contribute to this value

* The baseline value concerns the 13 regions and the state aid projects of sector, which, according to more recent instructions, do not contribute to the corresponding indicator, are also taken into account.

** The Target value concerns the 'net' target for the 8 Regions of pure objective 1

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
OUTPUT INDICATORS						
P.A.3 IMPROVING THE BUSINESS ENVIRONMENT						
1	Number of tourism and cultural infrastructures receiving support	Number	MIN. OF DEVELOPMENT / TAO	32	115	All the infrastructure actions of the tourism and culture sectors participate (Net target 83)

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
RESULT INDICATORS						
P.A.3 IMPROVING THE BUSINESS ENVIRONMENT						
1	Number of enterprises supported by Support Structures	Number	MIN. OF DEVELOPMENT / Gen. Secr. for Industry	25,000****	30,000	The system network of support structures (One-stop-shops) for investors is contributing to the value. (Net target 5,000)
2	Number of enterprises using financial instruments	Number	MIN. OF DEVELOPMENT	0	4,000	
3	Mobilization of private funds	Million €	MIN. OF DEVELOPMENT	0	240	

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

****The baseline value includes a reference to enterprises supported by KETAs (Centres of Entrepreneurial and Technological Development)

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE**	INDICATOR DEFINITION-COMMENTS
CORE INDICATOR						
P.A.4 COMPLETION OF THE COUNTRY'S ENERGY SYSTEM AND STRENGTHENING SUSTAINABILITY						
7	Number of direct investment aid projects to SMEs	Number	MIN. OF DEVELOPMENT / Energy sector	0	74	This concerns the projects of RES of the axis 4 (through Investment Law)
10	Investment induced million €)	Million €	MIN. OF DEVELOPMENT / Energy sector	0	520	The indicator concerns the RES projects, the electricity & natural gas projects, as well as the Fund of axis 4. It includes Public and Private Expenditure
23	Number of renewable energy projects	Number	MIN. OF DEVELOPMENT / Energy sector	(32) 58*	74	This concerns the projects of investment law of P.A.4 The baseline value refers the estimate of projects completed in 2008 within the framework of OP 'Competitiveness' in the 13 regions (value

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE (2008, end 3rd CSF)	TARGET VALUE**	INDICATOR DEFINITION-COMMENTS
CORE INDICATOR						
P.A.4 COMPLETION OF THE COUNTRY'S ENERGY SYSTEM AND STRENGTHENING SUSTAINABILITY						
						58). The baseline value in the 8 regions comes to 32.
24	Additional capacity of renewable energy production	MW	MIN. OF DEVELOPMENT / Energy sector	766*	156	Both the baseline value and the target value concern the installed RES power of the 8 regions
30	Reduction of greenhouse emissions (CO2 and equivalents, kt)	kt CO2	MIN. OF DEVELOPMENT / Energy sector	2,000	1,990	This concerns the annual decrease of greenhouses gas emissions (CO ₂ and equivalents) achieved by the actions of P.A.4. The values (baseline and target) exclusively concern the 8 regions.

* The baseline value concerns the 13 regions

**The Target value concerns the 'net' target for the 8 Regions of objective 1

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE* (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
OUTFLOW INDICATORS						
P.A.4 COMPLETION OF THE COUNTRY'S ENERGY SYSTEM AND STRENGTHENING SUSTAINABILITY						
1	Length of Natural Gas high pressure mains (km)	km.	MIN. OF DEVELOPMENT / Energy sector	441	600	This concerns the project to construct a high pressure Natural Gas pipeline between Aghii Theodori and Megalopolis (Net target 159)
2	Number of residences to undergo energy upgrades	Number	MIN. OF DEVELOPMENT / Energy sector	0	18,000	The action 'Energy Efficiency at Household Buildings' contributes to this value
3	Energy-consuming devices to be replaced	Number	MIN. OF DEVELOPMENT / Energy sector	0	36,400	

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

S/N	INDICATOR	UNIT OF MEASURE-MENT	SOURCE	BASELINE VALUE* (2008, end 3rd CSF)	TARGET VALUE***	INDICATOR DEFINITION-COMMENTS
RESULT INDICATORS						
P.A.4 COMPLETION OF THE COUNTRY'S ENERGY SYSTEM AND STRENGTHENING SUSTAINABILITY						
1	Annual committed transmission capacity of high pressure Natural Gas mains	million cubic meters	ΥΠΑΝ/ Τομέας Ενέργειας	617	1,167	The indicators refers to the cubic meters of high pressure Natural Gas that have been committed by contracts (Net target 550)
2	Annual primary energy saved	TOE	ΥΠΑΝ/ Τομέας Ενέργειας	0	134,720	This concerns the primary energy saved by the total number of energy efficiency improvement actions, by the actions to replace conventional sources with RES, etc. The electricity saved is reduced to primary energy.
3	Annual energy saved in the residential sector	GWh	ΥΠΑΝ/ Τομέας Ενέργειας	0	165	
4	Jobs created during the implementation of the operation	Staff years	ΥΠΑΝ/ Τομέας Ενέργειας	0	4,500	In equivalent staff years
5	Mobilization of private funds	M. €	ΥΠΑΝ/ Τομέας Ενέργειας	0	325	

*** In the 'Target Value' column, the baseline value has been added to the net target of the fourth programming period 2007-2013.

3.4 INSTITUTIONAL FRAMEWORK SUPPORT INTERVENTIONS

The efficiency of the Programme's interventions will be supported by the parallel adoption of the necessary actions aimed at abolishing counter-incentives and rigidity and developing an institutional framework favourable to entrepreneurship. These actions fall within the legislative sphere and do not constitute an object of the Programme, in the sense of project inclusion.

Both the competent Ministry of Development and the co-competent Ministries are elaborating and promoting a group of legislative interventions and regulations with a view to effectively supporting the National Reform Programme and to ensuring the conditions for the implementation of the O.P. Competitiveness and Entrepreneurship and of the other Sectoral Programmes in the NSRF.

Among the above actions, the most important, by sector covered by the programme, are the following

3.4.1. *Manufacturing/Processing*

In relation to the manufacturing/processing sector, institutional support actions pertain mainly to the following fields:

- ✓ dealing with structural problems in the functioning of markets
- ✓ improving the business environment and attracting investment
- ✓ strengthening competition
- ✓ opening markets
- ✓ increasing extroversion.

All institutional interventions aim at:

- ✓ creating a friendly, flexible business – labour environment, so as to both encourage domestic entrepreneurship and to attract international business interest for investment in Greece,
- ✓ strengthening and improving entrepreneurship, particularly in relation to facilitating the creation of new enterprises and their capacity to adapt to market changes (through networked actions),
- ✓ dealing with the problem of the size of production units, through efforts and initiatives towards the expansion of the production scale through mergers,
- ✓ upgrading the internal organization of enterprises,
- ✓ boosting extroversion, based on real competitive advantages by region, by case and by sector of activity,
- ✓ strengthening enterprise access to financial means and institutions, such as Venture Capital and Seed Capital

- ✓ upgrading processing and accompanying activities towards sectors with higher added value.

Among others, the following institutional and organizational regulations have been introduced:

- Promotion of a package of incentives to attract private capital and invigorate investments / entrepreneurship in selected priority sectors (e.g. high-tech and high innovation products and services, creation of applied and industrial research laboratories, development of technical and industrial designs, development of software and tourist infrastructure), though the **investment law (N.3299/2004)**, which has already been adapted to the guidelines of the new regional aid map.
- New leverage conditions for private capital through the new institutional framework for **Public-Private Partnerships (PPP)** (N.3389/2005).
- Improvement / simplification of legislative regulations, limitation in the number of laws and application of an **impact assessment system** with a view to improving the business environment. The drafting of a Regulation Impact Assessment Report, either by special Regulation Quality Control units set up within Ministries and regions, or by already existing services becomes mandatory. The impact assessment system is supervised by the G.S. of the Government.
- Simplification of procedures to create a favourable business environment, with a package of 31 constantly expanding measures launched by the Ministry of Development in support of enterprises, particularly SMEs. Among the steps already completed there is also the voting of the new law on the **simplification of licence granting to processing enterprises** (N.3325/2005).
- **Upgrading of the institution of Chambers and setting up of a General Registry of Commerce (GRC).** The GRC unifies and simplifies the formal framework for the exercise of any commercial activity, institutionalizes a system of rules and principles, which governs the exercise of commercial activities in full transparency and fights against bureaucracy by introducing and using electronic systems. **Law 3419/2005**, modernizing the framework of operation of Chambers and institutionalizing the General registry of Commerce, soon to acquire computerized infrastructures at regional scale, has already passed through Parliament.
- The elaboration of a national **Physical Plan including land use**, the lack of which in the past constituted a major obstacle to investment activities and increased environmental impact from the uncontrolled spatial development, has been completed.

Furthermore, the Ministry of Development is promoting the following bills of law:

- Reform, amendment, completion and adaptation to the current community legislation of codified Law 2190/1920 on **Sociétés Anonymes**. The objective of the new bill of law is to cultivate a favourable business climate through the simplification of procedures for the setting up of enterprises, the limitation of bureaucracy at all the stages of company operation and the strengthening of minority rights.
- **Revision of the Bankruptcy Code.** The relevant bill of law is being elaborated by the competent legislative committee of the Ministry of Justice. The revision aims at improving the business environment and «de-incriminating» business failure.
- Upgrading and expansion of the Industrial and Business Estates (VEPE) network into

a single national system, under a new institutional framework replacing Law 2545/1997 on VEPE, which will reflect modern **Business Parks'** organization and operation trends.

- Preparation – consultation on the **simplification of SMEs transfer procedures**
- Modernization and Codification of mining and quarrying industry legislation.

Reforms in the labour market will act as a complement to the above, aiming chiefly at strengthening enterprise and manpower adaptability to new conditions.

3.4.2. Research and Technology

Within the framework of increased investments in research, technology and innovation, in the perspective of an integrated strategy (policy mix), in addition to the special actions promoted in the 3rd CSF, the following measures were also adopted:

- Greece's participation - as of 2005, following the relevant agreement - in the European Space Agency. In addition to the direct benefits ensuing from the participation of research agencies and enterprises, it is expected that in the medium-to-long term there will be a development of infrastructure, R&D capacity and business activities in the space sector – a field marked by high technology innovation - at national level.
- The application of article 9 of Law 3296/2004 on tax deductible scientific and technology research expenses from company profits. The measure is being implemented.
- Investment Law 3299/2004 giving priority to investments in a/ innovative products and services, b/ advanced technology products and services, c/ creation of applied industrial research laboratories, d/ development of technical and industrial designs, e/ software development, f/ beginning of RTD financing from purely national funds, in addition to the regular state budget allocations funding research centres.
- Reduction of the cost for filing an application for patent, expected to have a positive impact on the increase of the numbers of patents granted.

The reform of the National Institutional Framework for Research and Technology is being promoted, its main targets being the improvement of the research environment and the increase of investments in research, technology and innovation. The relevant bill of law provides for the creation of new structures entrusted with the planning, adoption and implementation of research policy in the country.

The expansion of the scope for beneficiaries of Research and Technology actions was promoted and incorporated as an amendment to Law 3551/ Government Gazette FEK 76/A/ 2.4.2007; a Presidential Decree is expected to be issued, providing for the terms, conditions and procedure for the financing of beneficiary agencies as well as for any other special matter.

3.4.3. Energy

In the current programming period, national actions in the sector of energy and natural resources were implemented through the Community Support Framework and in particular through the Operational Programme for Competitiveness. The current programming period recorded some delays in the beginning of project implementation, mainly due to the need to adapt the Greek energy system to the new conditions of market deregulation. No doubt, energy market deregulation, combined with the major international energy initiatives, has created a new landscape in the energy sector. Our country, at the crossroads of major international power, natural gas and oil energy routes, has by now an attractive framework in order to attract major scale investments with a view to securing the energy supply, creating new jobs and upgrading its geo-strategic position.

Within this framework, the Ministry of Development proceeded to the relevant legislative regulations. Namely:

- ✓ In the natural gas sector, the legislative framework leading to the deregulation of the domestic market is being completed. Law 3428/2005, setting the rules of operation of the deregulated market, was voted in December 2005. In March 2006 a Ministerial Decision was issued providing for the mechanism for the calculation of transmission tariffs and soon another Ministerial Decision will be issued on the Standard Transmission Agreement between the users of the system and the Manager of the National Natural Gas Transmission System (ESMFA). These legislative interventions give the opportunity to any new supplier to operate in the Greek market. A derogation has already been requested on the basis of paragraph 4, article 28 of Directive 2003/55 and the process is already under way for an aid regime to be granted by the EU.
- ✓ The voting of Law 3426/2005 on the acceleration of the procedure for the deregulation of the electric power market created a modern framework, attractive to large scale investments in power generation, with evident benefits for employment and consumers alike. At the same time, competition is strengthened and progressively, by July 2007, all consumers, including households, will acquire the option to choose their supplier.
- ✓ Law 3468/2006 institutionalized a new framework for Renewable Sources of Energy and completed the transposition of Directive 2001/77/EC into national legislation. This law is an intervention of major importance for the promotion of the use of RES, given that it simplifies the licensing procedure and offers significant financial incentives for private investment.
- ✓ In June 2006, a bill of law on the Exploration and Exploitation of quarries was placed before public consultation. The bill of law aims on the one hand at rational quarrying in quarry areas, with parallel protection of the environment within the framework of the provisions of the country's land planning, and on the other hand at the formulation of provisions pertaining to all categories of mineral resources within a single text, together with all the provisions pertaining to the mining industry and favour a business climate and competitiveness in the industry. The bill of law is in the legislative technical elaboration phase and is expected to be put to the vote. The voting of the relevant law will solve long-standing pending matters. The creation of a new legislative framework will ensure the conditions for the promotion of new investment, the creation of new jobs and regional development.

In parallel, the following bills of law on energy and natural resources related issues are also being promoted.

Transposition of Directive 2002/91/EC of the European Parliament and of the Council on the energy performance of buildings.

Transposition of Directive 2004/8/EC of the European Parliament and of the Council on the promotion of heat and power co-generation.

Legislative regulations are also promoted in relation to the financing of the National Natural Gas Network Administrator (DESFA) by the Public Investment Programme (PDE) as well as to the procedures for the commissioning and execution of projects, procurement and services by DESFA S.A.

3.4.4. Tourism

- The Ministry of Tourism Development has initiated a series of legislative actions in order to complete, complement or upgrade the institutional framework, issue enforcement Ministerial Decisions or Joint Ministerial Decisions etc. necessary for the development of the sector in general but also for the successful implementation of the interventions planned for the 2007-2013 programming period. Among these interventions, the most important ones pertain to:
 - ✓ The modernization of the legal and institutional framework for private investment in the tourism sector (extension and updating of the Development Law provisions, other aid regimes, etc.).
 - ✓ The revision – updating of eligible works for the modernization of hotels within the framework of Development Law 3299/04.
 - ✓ The legal definition of specifications for Health Tourism Centres, for Training and Sports Tourism Centres and for Thematic Parks. Revision – updating of old specification for other special tourist infrastructure facilities.
 - ✓ The completion of the statutory framework on special forms of tourism and harmonization thereof with the remaining tourism legislation. Cooperation, whenever there are matters of joint competence with other ministries, towards the creation or complementing of the statutory framework for the development of forms of tourism showing great development potential in Greece, such as agritourism, spa tourism, scuba-diving and underwater tourism, cruises etc.
 - ✓ The improvement and simplification, in cooperation with the competent Ministry of Foreign Affairs, of the visa granting procedures to interested visitors from countries of particular relevance in relation to tourism (China, Russia, Balkan countries, etc.)
 - ✓ The elaboration of a Special Tourism Land Plan and harmonization of the town planning and land planning policy with the priorities of tourism policy and of incentive policy.
 - ✓ The modernization of the institutional and legislative framework on the creation of tourist

accommodation in combination with major hotel units and/or with special tourist infrastructure facilities.

- ✓ The upgrading of the consulting and strategic role of the National Tourism Council.
- ✓ The restructuring and staffing of extant Greek National Tourism Organization (GNTO) offices abroad and completion of planning for the areas worldwide where the creation of new offices is necessary.
- ✓ Settlement of the operation and activities of the Tourism Development Company (ETA) and valorisation of its assets.
- ✓ Progressive simplification and codification of the legislation governing the sector's activities and application of impact assessment on the new legislation according to the guidelines of the European Commission.

3.4.5. Trade and Consumer Protection

In order to achieve the goals set for the 2007-2013 programming period in the field of Trade and Consumers, the Ministry of Development has under way a series of legislative actions aimed at completing, complementing or upgrading the institutional framework, issuing enforcement Ministerial Decisions or Joint Ministerial Decisions etc. necessary for the development of the sector in general but also for the successful implementation of the interventions planned for the 2007-2013 programming period. Among these interventions, the most important ones pertain to:

- ✓ The revision of the Law on Competition.

The continuous simplification of the procedures for the setting up of enterprises and their improvement as an on-going process realized through institutional interventions and simplifications, through the introduction of technology and the training of public administration human resources.

The rapid promotion of market deregulation, particularly commercial services in sectors such as transport, energy, telecommunications, etc.

- ✓ The more rapid adoption of European regulations and recommendations related to the market of services (adaptation of the Greek institutional framework).
- ✓ The adoption of legislative measures and regulations so as to deal with monopolies and oligopolies as well as the grey market.
- ✓ The creation of incentives for mergers.

The modernization of the Legislation on Commercial town planning.

- ✓ The upgrading of the National e-Commerce Council and the rapid promotion of the adoption of the institutional framework (Greek and relevant Community Directives) on e-commerce as the case may be.

The institutional strengthening as well as the strengthening of infrastructures of Sectoral Associations and Chambers, so that they become the “Consultants” of Service Provision Companies on the largest part of the issues concerning them (information, training of personnel, know-how, investment, etc.) and they participate in the formulation of the General Secretariat for Commerce policies and in the management of development programmes in the service sector.

- √ The settlement of problems related to administrative procedures and regulations (Standardization of Public Sector Procedures)
- √ The lifting of institutional obstacles to entering the market and having access to regulated professions.

The bill of law promoted by the Ministry of Development includes also the revision of Law 2251/1994 on consumer protection.

3.5 Information on the complementarity of the RDP with measures financed by other means of the Common Agricultural Policy, through political Cohesion, as well as the European Fisheries Fund

3.5.1 Assessment and complementarity means

Relevance of the 2007-2013 RDP with the 2007-2013 National Strategic Reference Framework (NSRF)

The examination of the connectivity of the strategy of the 2007-2013 Rural Development Programme with national policies takes place through the examination / tallying of the General Objectives and the Priority Axes of the Rural Development Programme with the General Objectives of the NSRF.

The central element of the development strategy adopted by the NSRF is the regional dimension and specialization of developmental interventions, both sectorally and spatially. The NSRF strategy for the development of country is condensed in the five thematic priorities and the seventeen general objectives they include, as well as its territorial priorities.

The development of rural areas and areas dependent on fishing, the development of urban centres and the promotion of cross-border and trans-national partnerships form the territorial priorities of the NSRF.

The thematic priorities and general objectives of the NSRF are:

Investment in the productive sector of the economy

- ◆ GO 1 'Increase extroversion and Direct Foreign Investment inflow'.
- ◆ GO 2 'Develop entrepreneurship and increase productivity'
- ◆ GO 3 'Differentiate tourist products of the country'

Knowledge Society and Innovation

- ◆ GO 4 'Improve the quality and volume of investments in human resources to upgrade the Greek education system'
- ◆ GO 5 'Reinforce Research and Technology and promote Innovation in all sectors as a key factor for restructuring the Greek economy and transition to the knowledge economy'
- ◆ GO 6 'Achieve digital convergence through the incorporation and systematic use of information and communication technologies (ICT) in sectors of social and economic activity'

Employment and Social cohesion

- ◆ GO 7 'Reinforce the adaptability of workers and enterprises'
- ◆ GO 8 'Enhance access to employment'
- ◆ GO 9 'Promote Social Inclusion'
- ◆ GO 10 'Establish an efficient and economically viable Health system that will offer quality, personalised services to citizens and will focus on the continuous improvement of prevention and care services'
- ◆ GO 11 'Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)'

Institutional Environment

GO 12 'Improve national policies and ensure effective implementation to facilitate entrepreneurial action and improve citizens' quality of life'

Attractiveness of Greece and the Regions as places to invest, work and live

- ◆ GO 13 'Develop and modernise physical infrastructures, including transport services'
- ◆ GO 14 'Secure a sustainable supply of the country's energy'
- ◆ GO 15 'Manage the environment in a sustainable way'
- ◆ GO 16 'Implement environmental policies effectively'
- ◆ GO 17 'Promote Culture as a vital factor of economic growth'

The country's developmental strategy is completed and enriched by its territorial dimension. Three objectives connected to space are highlights and three territorial priorities emerge, namely:

- ◆ Sustainable urban growth
- ◆ Development of the country-side
- ◆ Cross-border, transnational and interregional cooperation

The General Objectives of the 2007-2013 Rural Development Programme are in direct or indirect synergy and correlation with the General Objectives of the NSRF. The following Table presents the correlation between the General Objectives of the Programme (horizontal columns) with the General Objectives of the NSRF (vertical columns).

TABLE A: MATRIX OF RELEVANCE OF NSRF GENERAL OBJECTIVES WITH THE 2007-2013 RDP GENERAL OBJECTIVES

SER. NO.	2007-2013 NATIONAL STRATEGIC REFERENCE FRAMEWORK GENERAL OBJECTIVES	2007-2013 RDP GENERAL OBJECTIVES			
		General Objective 1: To maintain and improve the competitiveness of agriculture, forestry and agro-food sectors	General Objective 2: Environmental protection and sustainable management of natural resources	General Objective 3: To improve quality of life in rural areas and encourage diversification of rural economies	General Objective 4: To develop local possibilities for employment and diversification of rural economies through the 'Leader' approaches
1	Increase extroversion and Direct Foreign Investment inflow	(□)		(□)	(□)
2	Develop entrepreneurship and increase productivity	□		□	□
3	Differentiate tourist products of the country			□	□
4	Improve the quality and volume of investments in human resources to upgrade the Greek education system	□			
5	Reinforce Research and Technology and promote Innovation in all sectors as a key factor for restructuring the Greek economy and transition to the knowledge economy	(□)			
6	Achieve digital convergence through the incorporation and systematic use of information and communication technologies (ICT) in sectors of social and economic activity	□			
7	Reinforce the adaptability of workers and enterprises	(□)			
8	Enhance access to employment	(□)		(□)	(□)
9	Promote Social Inclusion				
10	Establish an efficient and economically viable Health system that will offer quality, personalised services to citizens and will focus on the continuous improvement of prevention and care				

	services				
11	Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)			<input type="checkbox"/>	<input type="checkbox"/>
12	Improve national policies and ensure effective implementation to facilitate entrepreneurial action and improve citizens' quality of life				
13	Develop and modernise physical infrastructures, including transport services			(<input type="checkbox"/>)	
14	Secure a sustainable supply of the country's energy				
15	Manage the environment in a sustainable way	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Implement environmental policies effectively		<input type="checkbox"/>		
17	Promote Culture as a vital factor of economic growth			<input type="checkbox"/>	<input type="checkbox"/>
	TERRITORIAL PRIORITIES				
18	Sustainable urban growth				
19	Development of the country-side	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	Cross-border, transnational and interregional cooperation				<input type="checkbox"/>

☐ *Expected direct contribution or synergy*

(☐) *Expected indirect contribution or synergy*

The first General Objective of the 2007-2013 RDP 'To maintain and improve the competitiveness of agriculture, forestry and agro-food sectors' directly serves four General Objectives and one territorial priority of the NSRF. Specifically, it directly contributes towards achieving the following NSRF General Objectives:

- ◆ GO 2 'Develop entrepreneurship and increase productivity'
- ◆ GO 4 'Improve the quality and volume of investments in human resources to upgrade the Greek education system'

- ◆ GO 6 'Achieve digital convergence through the incorporation and systematic use of information and communication technologies (ICT) in sectors of social and economic activity'
- ◆ GO 15 'Manage the environment in a sustainable way' of the NSRF, as well as territorial priority 'Development of the country-side'.

The RDP indirectly contributes to 4 General Objectives of the NSRF, namely:

- ◆ GO 1 'Increase extroversion and Direct Foreign Investment inflow'
- ◆ GO 5 'Reinforce Research and Technology and promote Innovation in all sectors as a key factor for restructuring the Greek economy and transition to the knowledge economy'
- ◆ GO 7 'Reinforce the adaptability of workers and enterprises'
- ◆ GO 8 'Enhance access to employment'

The second General Strategic Objective of the 2007-2013 RDP 'Environmental protection and sustainable management of natural resources' is directly related to General Objectives 15 'Manage the environment in a sustainable way' and 16 'Implement environmental policies effectively', as well as territorial priority 'Development of the country-side'.

The third General Objective of the 2007-2013 RDP 'To improve quality of life in rural areas and encourage diversification of rural economies' is directly related to five General Objectives and one territorial priority of the NSRF. Specifically, it directly contributes towards achieving GO 2 'Develop entrepreneurship and increase productivity', GO 3 'Differentiate tourist products of the country', GO 11 'Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)', GO 15 'Manage the environment in a sustainable way' and GO 17 'Promote Culture as a vital factor of economic growth' of the NSRF, as well as territorial priority 'Development of the country-side'. It indirectly contributes towards achieving GO 1 'Increase extroversion and Direct Foreign Investment inflow', GO 8 'Enhance access to employment' and GO 13 'Develop and modernise physical infrastructures, including transport services' of the NSRF.

Finally, the fourth General Objective of the 2007-2013 RDP directly serves the achievement of five (5) General Objectives of the NSRF and two (2) territorial priorities. Specifically, it is directly related to GO 2 'Develop entrepreneurship and increase productivity', GO 3 'Differentiate tourist products of the country', GO 11 'Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)', GO 15 'Manage the environment in a sustainable way' and GO 17 'Promote Culture as a vital factor of economic growth' of the NSRF, as well as territorial priorities 'Development of the country-side' and 'Cross-border, transnational and interregional cooperation'. It indirectly contributes to GO 1 'Increase extroversion and Direct Foreign Investment inflow' and GO 8 'Enhance access to employment' of the NSRF.

The following table examines the contribution of the Priority Axes of the 2007-2013 RDP towards achieving the General Objectives of the NSRF.

TABLE B: MATRIX OF RELEVANCE OF NSRF GENERAL OBJECTIVES WITH THE 2007-2013 RDP PRIORITY AXES

SER. NO.	2007-2013 NATIONAL STRATEGIC REFERENCE FRAMEWORK GENERAL OBJECTIVES	2007-2013 RDP PRIORITY AXES			
		Axis 1: Improvement of the competitiveness of agriculture and forestry	Axis 2: Improvement of the environment and the country-side	Axis 3: Quality of life in rural areas and diversification of rural economies	Axis 4: To implement the 'Leader' approaches
1	Increase extroversion and Direct Foreign Investment inflow	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
2	Develop entrepreneurship and increase productivity	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
3	Differentiate tourist products of the country			<input type="checkbox"/>	<input type="checkbox"/>
4	Improve the quality and volume of investments in human resources to upgrade the Greek education system	<input type="checkbox"/>			
5	Reinforce Research and Technology and promote Innovation in all sectors as a key factor for restructuring the Greek economy and transition to the knowledge economy	<input type="checkbox"/>			
6	Achieve digital convergence through the incorporation and systematic use of information and communication technologies (ICT) in sectors of social and economic activity	<input type="checkbox"/>			
7	Reinforce the adaptability of workers and enterprises	<input type="checkbox"/>			
8	Enhance access to employment	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
9	Promote Social Inclusion				
10	Establish an efficient and economically viable Health system that will offer quality, personalised services to citizens and will focus on the continuous improvement of prevention and care services				
11	Develop the economic, social and developmental			<input type="checkbox"/>	<input type="checkbox"/>

	aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)				
12	Improve national policies and ensure effective implementation to facilitate entrepreneurial action and improve citizens' quality of life				
13	Develop and modernise physical infrastructures, including transport services			(□)	
14	Secure a sustainable supply of the country's energy				
15	Manage the environment in a sustainable way	(□)	□	(□)	(□)
16	Implement environmental policies effectively		□		
17	Promote Culture as a vital factor of economic growth			□	□
	TERRITORIAL PRIORITIES				
18	Sustainable urban growth				
19	Development of the countryside	□	□	□	□
20	Cross-border, transnational and interregional cooperation				□

□ *Expected direct contribution or synergy*

(□) *Expected indirect contribution or synergy*

The interventions of the Priority Axes of the Rural Development Plan directly and indirectly serve the following General Objectives of the NSRF:

PA 1 'Improvement of the competitiveness of agriculture and forestry' directly serves the achievement of the seven (7) following General Objectives of the NSRF:

- ◆ GO 1 'Increase extroversion and Direct Foreign Investment inflow' through actions that aim to strengthen the extroversion of agricultural and agro-food products (measure 133),
- ◆ GO 2 'Develop entrepreneurship and increase productivity' through the measures that finance investments in agricultural (measure 121) and forestry holdings

(measure 122) and SMEs involved in the first processing stage and trade of agricultural and forestry products (measure 123),

- ◆ GO 4 'Improve the quality and volume of investments in human resources to upgrade the Greek education system' through the interventions of measure 111,
- ◆ GO 5 'Reinforce Research and Technology and promote Innovation in all sectors as a key factor for restructuring the Greek economy and transition to the knowledge economy', given the emphasis placed on promoting innovation and introducing new technologies to the productive process, as stipulated in measures (121, 122, 123),
- ◆ GO 6 'Achieve digital convergence through the incorporation and systematic use of information and communication technologies (ICT) in sectors of social and economic activity', through the interventions for the procurement of Pcs and interconnection with the Internet, as stipulated in the second sub-measure of measure 121,
- ◆ GO 7 'Reinforce the adaptability of workers and enterprises', through the investments of measure 121 that stipulates the provision of aid to restructure crops.
- ◆ GO 8 'Enhance access to employment', through measure 112, which concerns the provision of premiums to set up young farmers.

As well as territorial priority 'Development of the countryside'.

Moreover, it indirectly contributes to GO 15 'Manage the environment in a sustainable way' of the NSRF, through the implementation of the land improvement works of measure 125 and the provision of aid for the relocation of livestock farms (measure 121).

The second Priority Axis of the RDP 'Improvement of the environment and the country-side' directly contributes towards achieving General Objectives 15 'Manage the environment in a sustainable way' and 16 'Implement environmental policies effectively' of the NSRF, as well as territorial priority 'Development of the country-side'. Preserving biodiversity, protecting soil and water, reducing the impact of climate change, preserving and protecting ecologically vulnerable regions are priorities of the measures of Axis 2 of the RDP.

The third Priority Axis of the RDP 'Quality of life in rural areas and diversification of rural economies' is directly related to the following five (5) General Objectives of the NSRF:

- ◆ GO 2 'Develop entrepreneurship and increase productivity' by encouraging investments (measures 311, 312, 313),
- ◆ GO 3 'Differentiate tourist products of the country', through measure 331,
- ◆ GO 8 'Enhance access to employment', through more favorable terms and conditions for inclusion in the measures that concern support of the private investments of the axis for youth and women,

- ◆ GO 11 'Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)' due to more favorable terms and conditions for inclusion in the measures that concern support of the private investments of the axis for women,
- ◆ GO 17 'Promote Culture as a vital factor of economic growth' through measures 322 and 323,

as well as territorial priority 'Development of the countryside'.

The 3rd Priority Axis indirectly contributes towards achieving General Objectives 1 'Increase extroversion and Direct Foreign Investment inflow', through interventions to upgrade and protect the natural, but mainly the man-made environment in rural regions, which is a significant factor for attracting investments either for entrepreneurial activity or for residential purposes, GO 13 'Develop and modernise physical infrastructures, including transport services' and GO 15 'Manage the environment in a sustainable way', through the interventions of measure 321.

The final Priority Axis of the RDP, which concerns the implementation of the 'Leader' approach, directly serves the following five (5) General Objectives of the RDP:

- ◆ GO 2 'Develop entrepreneurship and increase productivity' through measures 411 and 413,
- ◆ GO 3 'Differentiate tourist products of the country', through measure 413,
- ◆ GO 8 'Enhance access to employment', through more favorable terms and conditions for inclusion in the measures that concern support of the private investments of the axis for youth and women,
- ◆ GO 11 'Develop the economic, social and developmental aspects of gender equality issues, by linking them directly with national political priorities (growth – employment – social cohesion)' due to more favorable terms and conditions for inclusion in the measures that concern support of the private investments of the axis for women,
- ◆ GO 17 'Promote Culture as a vital factor of economic growth' through measures 322 and 323,

as well as territorial priorities 'Development of the country-side' and 'Cross-border, transnational and interregional cooperation', through the Cooperation Plans to be developed by the Local Action Groups of the Axis.

It indirectly contributes to GO 1 "Increase extroversion and Direct Foreign Investment inflow", through interventions to upgrade and protect the natural, but mainly the man-made environment in rural regions, which is a significant factor for attracting investments either for

entrepreneurial activity or for residential purposes, and GO 15 'Manage the environment in a sustainable way', through the interventions of measure 321.

Complementarity of the RDP with EU Strategies and Action Plans

The Greek Rural Development Programme for the 4th Programming Period complements the strategies and action plans of the EU. Specifically:

- With the 6th Community Environment Action Plan, mainly through Axis 2, as well as Axis 3, and, specifically, with:
 - ◆ *the Community biodiversity strategy – Natura Network* with measures such as aid in Natura areas (Axis 2), agri-environmental and forestry measures (Axis 2) and aid in disadvantages areas (Axis 2).
 - ◆ *Directive 2000/60/EC* of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, with measures such as improvement of the water balance through the modernisation of irrigation networks and the adoption of improved irrigation techniques (Axis 1) and the promotion of crops and farming practices to save water resources in areas where the water Directive is applied with support for dry or less water-absorbing crops and the avoidance of potential pollution (Axis 2).
 - ◆ *the soil protection strategy* through the special objective for agri-environmental measures (vegetation cover of soil, fallow land, etc.) and forest-environment measures, such as afforestation of agricultural lands and prevention and restoration of the forestry production potential damaged by natural disasters (Axis 2).
 - ◆ *the Community climate change programme and the air pollution strategy* with measures for the use of renewable energy sources (axis 1), the encouragement of the production of organic farming and livestock products, the promotion of farming practices and integrated management to reduce pollution caused by nitrates of farming origin and afforestation of farming and non-farming land, etc. (Axis 2).
 - ◆ *the pesticide use strategy* with agri-environmental measures, such as the promotion of farming practices and integrated management to reduce the use of pesticides in environmentally vulnerable areas and the promotion of organic farming (Axis 2) and measures such as investments in agricultural holdings while observing the minimum Community standards (Axis 1).
- With the EU Forestry Strategy, through Axis 2, as well as Axis 1, and, specifically, with:
 - ◆ infrastructure measures for the development of forestry, improvement of the economic value of forests and use of consultancy services in the sector (Axis 1) the entire group of measures for the sustainable use of forest land (Axis 2).

- With the European action plan for organic food and farming, mainly through Axis 2, as well as Axis 2, and, specifically, with:
 - ◆ Agri-environmental measures (organic farming and livestock farming) (Axis 2)
 - ◆ Measures for the provision of advice, participation in quality systems, modernization of agricultural holdings, education/training and increase of the added value of agricultural products (Axis 1).
- With Innovation, mainly through Axes 1, 3 and 4 (Leader), as well as Axis 2. Specifically:
 - ◆ in Axis 1 with measures for agricultural, forestry holdings and processing enterprises for the promotion of innovation and transfer of knowledge through training; in Axis 2 with measures to introduce land management practices and energy solutions; in Axes 3 and 4 with measures for the creation of micro-enterprises outside the primary sector and the provision of basic services in rural areas.

Complementarity of the RDP with the OP 'Environment & Sustainable Development' 2007-2013 and the Regional Operational Programmes of the 2007-2013 period

For the Environment sector in total, significant funds will be provided during the 4th programming period (2007-2013), which will include Community, National and Private resources through the OP 'Environment & Sustainable Development' 2007-2013, the ROPs and the 2007-2013 RDP.

Complementarity of the RDP with the OP 'Environment & Sustainable Development' 2007-2013

The Rural Development Operational Programme (RDP) 2007-2013 contributes significantly to issues that concern the Environment and Sustainable Development. The programme is expected to complement the OP 'Environment & Sustainable Development' 2007-2013 in the following Priority Axes:

- ◆ Priority Axes 1 & 6 (Protecting the Atmospheric Environment – Managing Climate Change) of the OP 'Environment & Sustainable Development' 2007-2013, through Priority Axes 1 & 2 of the RDP, with the measures for promoting the use of renewable energy sources (axis 1), encouraging the production of organic farming and livestock products, promoting farming practices and integrated management to reduce pollution caused by nitrates of farming origin and afforestation of farming and non-farming land (Axis 2). The majority of RDP measures directly or indirectly contribute towards reducing greenhouse gas emissions.
- ◆ Priority Axis 9 of the OP 'Environment & Sustainable Development' 2007-2013 (Protecting Nature and Biodiversity), mainly through the measures of Axis 2.

- ◆ Priority Axes 2 & 7 of the OP 'Environment & Sustainable Development' 2007-2013 (Protecting and Managing Water Resources), with measures such as improvement of the water balance through the modernisation of irrigation networks and the adoption of improved irrigation techniques (Axis 1) and the promotion of farming practices to save water resources, reduction of the use of fertilizer and pesticides and the promotion of fallow land, which contribute to its reduction (Axis 2).
- ◆ Priority Axis 4 of the OP 'Environment & Sustainable Development' 2007-2013 (Protecting soil systems – Managing solid waste), with agri-environmental measures (vegetation cover of soil, fallow land, etc.) and forest-environment measures, such as afforestation of agricultural lands and prevention and restoration of the forestry production potential damaged by natural disasters, provision of aid to mountainous and disadvantaged areas for the continuation of agricultural activities (Axis 2), which contribute towards protection soil from erosion and desertification.

Complementarity of the RDP with the Regional Operational Programmes of the 2007-2013 period

The developmental objectives for environmental protection are also served through the ROPs. The creation of five (5) programming / developmental territorial units, as presented in the chapter of the overall strategy of the NSRF, observes developmental criteria, is directly related to a number of factors that summarise the experience of the last 20 years concerning the planning and exercise of regional policy and is expected to directly strengthen the regional competitiveness of the country.

Within this framework, there is a common structure of the thematic priority Axes of the five ROPs, as well as a common core of interventions, as follows:

INDICATIVE ROP PRIORITY AXES	COMMON CORE OF ROP INTERVENTIONS
Infrastructures and accessibility services	<ul style="list-style-type: none"> • Accessibility projects of local (or non-local) scale
Sustainable Growth and Quality of Life	<ul style="list-style-type: none"> • Environmental interventions of local (or non-local) scale • Cultural interventions (strengthening of key cultural infrastructures ,protection and promotion of cultural heritage) • Health and social solidarity interventions (infrastructure of hospitals and social care structures, special units, health and open care centres, specialised equipment)

	<ul style="list-style-type: none"> • Social infrastructures and services* • Sustainable urban development interventions • Interventions to support mountainous, disadvantaged and insular areas
Digital Convergence and Entrepreneurship	<ul style="list-style-type: none"> • Entrepreneurship, Competitiveness and Digital Convergence Interventions

The programme is expected to complement the ROPs of the 2007-2013 period on their common Priority Axis titled 'Sustainable Growth and Quality of Life'.

It is clear that there is complementarity of the common core of interventions of the Priority Axes 'Sustainable Growth and Quality of Life' of the five ROPs, as well as the environmental interventions of local (or non-local) scale and the interventions to support mountainous, disadvantaged and insular areas with the measures of Priority Axis 2 of the RDP, such as with measures such as aid to Natura areas (Axis 2), agri-environmental and forestry environmental measures (Axis 2) and aid in disadvantaged areas (Axis 2), with emphasis placed on farming ecosystems.

3.5.2 Complementarity in relation to the measures of Axes 2 and 3 of the RDP

Complementarity of interventions with those financed by the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF) – Criteria of differentiation of Funds' Interventions from EAFRD and EFF.

The text below is common for all the Operational Programmes of the NSRF, the Rural Development Programme and the Operational Programme for Fisheries, and sets the limits of interventions between the Funds (ERDF, ESF, CF), the EAFRD and the EFF.

3.5.2.1. General

The bulk of interventions pertaining to the improvement of accessibility to rural areas and environmental infrastructure interventions **will be covered by the Cohesion Fund (CF) and the European Regional Development Fund (ERDF)**; aid to large scale investment projects, the protection of cultural heritage, the upgrading of the health and social welfare system, the promotion of digital convergence as well as the improvement of competitiveness and of the business environment **will be covered by the ERDF**, while the upgrading of public administration, the improvement of the educational system and interventions on human resources **will be covered by the European Social Fund (ESF)**.

The **adoption of differentiation criteria** between similar categories of actions that could be financed by different Funds is not governed by a “management” rationale, but **reflects the priorities of the various policies** (regional policy, rural development policy, fisheries policy) all of which are, of course, influenced by the spatial dimension.

The large surface of rural areas, the length of the coastline and the countless islands render prohibitive the adoption of the “spatial – geographic” criterion as the sole criterion for the differentiation of the Funds’ operations; it is a fact that EAFRD and EFF resources do not suffice to meet in a satisfactory way the needs in the **two general groups of interventions** through which the **objective of differentiating the economy in rural areas and in fisheries-dependent areas and the objective of improving the quality of life in rural areas** will be served.

The two general groups of interventions pertain to:

- Interventions in the production environment
- Infrastructure projects to improve the quality of life of the population in rural areas and in fisheries-dependent areas.

There is also a need to adopt criteria in the following intervention fields:

- Training actions – Human resources
- Interventions in the field of the Environment
- Interventions based on the LEADER approach and financed by the EAFRD
- Interventions financed by the EFF for the development of selected fisheries areas through a local strategy.

On the basis of the above approach, the criteria for the differentiation of operations listed herebelow constitute a blending of spatial – geographic, economic and administrative criteria.

For interventions to be implemented in the areas of application of **Priority Axis 4 Leader of the Rural Development Programme (RDP) 2007 -2013**, having as their legal basis articles 61 - 64 of Regulation (EC) 1698/2005 of the Council, dated 20/9/2005, «on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)», **the criterion for the differentiation of interventions is the Leader approach.**

Furthermore, for interventions aiming at the development of **selected fishing areas** within the implementation framework of **Priority Axis 4 of the O.P. Fisheries 2007 -2013**, having as their legal basis articles 43 - 45 of Regulation (EC) 1198/2006 of the Council, dated 27/7/2006, on the «European Fisheries Fund», the criterion for the differentiation of interventions is the local strategy selected for each fishing area.

Investment projects for the **modernization of agricultural holdings** (crop and animal production) and **forestry holdings (axis 1 RDP)**, within the framework of co-financed programmes, are financed exclusively by the **EAFRD**.

Investment projects **increasing the added value of agricultural, animal husbandry and forestry products (axis 1 RDP)**, **entrepreneurship actions and in general all the actions**

pertaining to the initial processing and/or marketing of products **covered by Annex I of the Treaty** (not including investments in retail trade), **as well as forestry products, are financed exclusively by the EAFRD**. According to Regulation 1698/2005, **support from the EAFRD is limited to micro, small and medium-sized enterprises, within the meaning of Commission Recommendation 2003/361/EC¹ and to enterprises with less than 750 employees or with a turnover of less than 200 million €**. In the case of forestry the **EAFRD assists micro enterprises, according to Regulation 1698/2005**.

Investment projects in **aquaculture, inland water fisheries and marine fisheries** are financed by the EFF until O.P. Fisheries resources are used up.

Investment projects in the initial **processing and marketing** of fish, shellfish etc. are financed exclusively by the EFF until O.P. Fisheries resources are used up.

EFF support to **aquaculture and to the processing of fisheries and aquaculture products** is limited to **enterprises as provided for in Regulation 1198/2005²**.

Water supply, sewerage systems and waste water treatment plants are financed exclusively by the ERDF and the Cohesion Fund.

The differentiation criteria presented below in financial terms pertain to the overall budget of the intervention (public expenditure and private participation).

¹ Micro, small and medium-sized enterprises are defined on the basis of the number of employees and of their turnover or their total annual balance sheet. Namely:

- ☒ A micro enterprise is an enterprise with less than 10 employees, with a turnover or a total balance sheet not exceeding 2 million euro.
- ☒ A small enterprise is an enterprise with less than 50 employees, with a turnover or a total balance sheet not exceeding 10 million euro.
- ☒ A medium-sized enterprise is an enterprise with less than 250 employees, with a turnover not exceeding 50 million euro or with a total annual balance sheet not exceeding 43 million euro.

² EFF assistance to investment projects is limited, according to Regulation 1198/2006, to micro, small and medium-sized enterprises (according to Commission Recommendation 2003/361/EC), as well as to enterprises with less than 750 employees or with a turnover of less than 200 million euro.

3.5.2.2. Special differentiation criteria

3.5.2.2.1 Infrastructure projects financed exclusively by the EAFRD and the EFF

Interventions on infrastructures are carried out in all rural areas in which **priority axis 3 of the Rural Development Programme (RDP) 2007 -2013** is implemented, in municipal departments with up to 3000 inhabitants and in O.P. Fisheries implementation areas, as follows:

Infrastructures encouraging tourism activities and preserving and upgrading the cultural heritage (axis 3 RDP)

- Local tourist information centres (information desks – kiosks), signs for sights, monuments, etc., bicycle trails in rural areas, highlighting and promotion of comparative advantages of the various areas.
- Infrastructure for the preservation, restoration and upgrading of the cultural heritage, such as the cultural features of agricultural rural areas (monuments, bridges, mills, oil presses, wine presses, fountains, etc.) and the rural landscape (such as terraces, etc.).

The above are local scale interventions and **no intervention on monuments falling under the competence of the Ministry of Culture is allowed.**

The total budget of these interventions cannot exceed an upper limit of **300.000€** .

Interventions belonging to the same category yet having higher budgets than the above limit will be co-financed by the ERDF.

Infrastructures and Services aimed at improving the quality of life in rural areas (axis 3 RDP)

- A)** Interventions on buildings to transform them into museums – collections – exhibitions of folk / agricultural cultural heritage, day-care centres for preschoolers, libraries, conservatoires, halls hosting cultural activities (theatre, movies).

The total budget of these interventions cannot exceed an upper limit of 300.000 €. Interventions belonging to the same category yet having higher budgets than the above limit will be co-financed by the ERDF.

- B)** Support to cultural events and events highlighting and preserving the local heritage – support to cultural agencies for small scale infrastructure, procurement of equipment, musical instruments, uniforms, etc.

The total budget of these interventions cannot exceed an upper limit of 300.000 €. Interventions belonging to the same category yet having higher budgets than the above limit will be co-financed by the ERDF.

Interventions under points A and B above have no relevance to business activities.

Restoration and development of villages (axis 3 RDP).

In terms of the restoration and development of villages, financing will be given to actions aimed at the overall upgrading of villages (mainly mountain and disadvantaged municipal departments with up to 3,000 inhabitants, within the implementation framework of axis 3 of the RDP) in **application of a global upgrading study³** of the settlement. Eligible categories of expenditures pertain to the following:

- upgrading and remodelling of public areas (configuration of open-air areas, paving, creation of pedestrian areas, lighting, etc.)
- restoration of buildings for public use
- restoration of façades with special features of aesthetic and historical value

The measure pertains mainly to **public works** and the total budget for the above interventions will be of up to **1.000.000 €**.

Actions for the **restoration and development of designated “traditional settlements” will be financed exclusively by the ERDF.**

Access infrastructure

Small projects ensuring access to agricultural holdings, with a total budget of **up to 500.000€**, are financed by the EAFRD.

³ In relation to this measure, a necessary preliminary condition is the drafting of a global aesthetic and functional upgrading and enhancement study for the entire settlement or the drafting of an upgrading plan. This intervention category is not applicable on abandoned settlements. The contents of the study will be defined in cooperation with the YPEHODE (Ministry of the Environment, Physical Planning and Public Works). Priority will be given to areas in which the basic networks (water supply, sewage) have already been completed.

Fishing shelters (Axis 3 O.P. Fisheries)

The EFF will finance:

- (a) The construction of small fishing harbours (up to 50 berthing places and 1,5M€ maximum budget in remote Greek islands such as those listed under chapter 1 of the O.P. Fisheries 2007 –2013).
- (b) The modernization and equipment of existing fishing shelters.

Information and Communication Technology (ICT) Infrastructures

Interventions pertaining to ICT infrastructure, development and applications in the service of citizens are mainly financed by the ERDF. The development of Broadband network infrastructure is also financed by the EAFDR in 'white' areas of Axis 3 interventions of the RDP, to cover the 'white spots' in the broadband map of the country, in the areas in question.

The interventions are implemented in the framework of the Lisbon strategy objectives and the i-2010 initiative, in view of including better public services and improving the citizens' quality of life through the use of ICT applications.

Other infrastructure projects

Other infrastructure projects in agricultural and fishing areas are financed by the ERDF.

3.5.2.3. Human resources

3.5.2.3.1. Rural Development Programme (RDP) 2007-2013

RDP beneficiaries (axes 1,2,3, and 4) will receive vocational training financed exclusively by the ESF and consequently there is no overlapping of actions between the EAFRD and the ESF.

3.5.2.3.2. Operational Programme Fisheries 2007-2013

No training actions are included in the OP Fisheries 2007 – 2013 and relevant actions will be implemented with ESF co-financing.

3.5.2.4. Environment

3.5.2.4.1 Criteria of differentiation by environmental sector

Special environmental actions have been grouped by environmental sector (nature, soil, air, acoustic environment, climate change, civil protection, mechanisms-tools-institutions, aquatic environment, land/town planning).

In the case of fields that can be financed by more than one Fund and for which there is a need to define differentiation criteria and ensure complementarity the following criteria -listed by sector - are applied:

“Nature” sector:

- The application of **measures for the protection of forest ecosystems and, in general, interventions in Natura 2000 network sites** is one of the most important fields for the application of differentiation criteria, particularly between programmes financed by the ERDF and by the Rural Development Programme (see analysis in table 2 below).
- **Treatment and monitoring of genetically modified products and organisms used by producers.** The actions to be financed by each O.P. are specialized in the relevant descriptions of programming documents. **A general differentiation criterion is Annex I to the Treaty**, where relevant actions are eligible only within the framework of the EAFRD.
- **Forest fires:** The **RDP** will cover the sector of forest fires and will finance in particular actions similar to those financed by the ROPs through the EAGGF-O during the 3rd programming period, such as **forest ecosystems prevention and protection works against fires and other natural disasters**. (Fire fighting equipment is financed by the ERDF (see also table 1)).

“Air environment” sector:

- **Buttressing protected areas against natural or other hazards** (transport, use or storage of substances – fires).

The EAFRD finances actions for the prevention of forest fires, as per above.

“Climate change” sector:

- **Promotion of Renewable Energy Sources (RES):** The EAFRD (through the RDP) will co-finance exclusively **small scale** (total budget up to **300.000 €**) investment projects for the promotion of RES, pertaining to beneficiary farmers and for own use, within the framework of **Axis 3 of the RDP**.

Country-wide investments in RES production units for the sale of energy on the market will be financed by the ERDF and ECF regardless of their budget.

Investments at the level of agricultural holdings for the promotion of energy crops will be financed by the EAFRD (Priority Axis 1 of the RDP 2007 – 2013).

- **Strengthening ozone layer protection technologies and products:**

RDP interventions in this sector pertain exclusively to investments in agricultural holdings (crop and animal production) as well as enterprises linked to the initial processing of products listed in Annex I to the Treaty.

Interventions for the protection of the ozone layer are included in the RDP through the Simplified Area Payment Scheme, within the framework of agri-environmental measures.

“Mechanisms, Tools, Institutions” sector:

Exclusive ERDF competence.

“Land planning – Town planning” sector:

- Interventions are exclusively financed by the ERDF. As to interventions pertaining to the demarcation, recording and plotting of forests and forest lands, financing from the EAFRD is possible.

Table 1 below, breaking down ERDF, Cohesion Fund and EAFRD financed interventions in the sector of the environment, was drafted on the basis of the most important fields where overlapping could occur, as identified.

TABLE 1:OVERLAPPING FIELDS OF INTERVENTION BETWEEN ERDF, C.F. AND EAFRD IN THE SECTOR OF THE ENVIRONMENT: SUGGESTED DIFFERENTIATION CRITERIA

CATEGORIES OF INTERVENTION	ERDF	COHESION FUND	EAFRD
Anti-flood works	♦	♦	
Anti-flood works, within the framework of mountain hydrometry interventions in forests			♦
Irrigation networks ⁴			♦
Water-supply networks	♦	♦	
Reservoirs, Artificial lakes, Dams for irrigation			♦
Reservoirs, Artificial lakes, Dams for water supply	♦	♦	
Reservoirs, Artificial lakes, Dams on islands or in agricultural areas, under conditions (mixed use, irrigation-water supply)			♦
Biodiversity, interventions in Natura 2000 ⁵ sites	♦		
Biodiversity, interventions in areas with high aesthetic value, through agri-environmental and forestry-environmental measures within the implementation framework of Regulation 1698/2005			♦
Research and technology in environmental matters	♦		
Forests, fire prevention, reforestation			♦
Hiking trails, cycling routes, signs, observatories, viewpoints (agricultural areas)			♦
Hiking trails, cycling routes, signs, observatories, viewpoints (Natura 2000 sites)	♦		
Water supply / replacement of networks etc.	♦	♦	
Wastewater treatment plants	♦	♦	
Waste management	♦	♦	
Endangered plant and animal resources (species and varieties)			♦
Wild flora and fauna	♦		
Protection of wild flora and fauna through the application of agri-environmental measures within the implementation framework of Regulation 1698/2005			♦
Infrastructure works in NATURA 2000 ⁶ sites	♦	♦	♦

⁴ There are no mixed networks

⁵ Classification of interventions according to the Guidance Handbook for the financing of the Natura 2000 network(2006)

⁶ Infrastructure works in Natura 2000 sites follow the classification by Fund as recorded in tables 1 and 2.

CATEGORIES OF INTERVENTION	ERDF	COHESION FUND	EAFRD
Certification and labelling mechanisms (products in Annex I to the Treaty)			♦
Certification and labelling mechanisms (other products)	♦		
Mechanisms monitoring the quality of the environment	♦		
Biofuels – small scale production units for own use			♦
Biofuels (large production units)	♦		
Exploitation of biomass of animal husbandry and forestry origin			♦
Fire-fighting equipment	♦		

The Cohesion Fund has been included as, it had not been listed among the Funds that finance actions pertaining to climate change, infrastructure works in Natura sites and management of water resources, at the moment that the OPs of the NSRF 2007-2013 had been submitted and approved.

3.5.2.4.2 Differentiation criteria for interventions in Natura 2000 sites

The **Natura 2000** Network covers various types of surface and soil in the country, which include agricultural lands, forests, other land surfaces (such as alpine, shrubs, abandoned agricultural lands, etc.), inland waters, wetlands, coastal zones and marine zones. Consequently, it becomes obvious that the relevant activities fall both within the field of interventions of ERDF programmes and of programmes financed by the EAFRD and the EFF; therefore differentiation is necessary.

Given that the greatest part of Community co-financing to the **Natura 2000** network comes from extant Community funds earmarked for the support of rural, regional and marine development, the European Commission has issued a guidance handbook on the financing of the **Natura 2000** network ("Financing Natura 2000 – Guidance Handbook" (EC) 2006). The Handbook in question was a useful tool in determining the complementarity and the synergies that develop between the various financing means as well as in avoiding possible overlapping and duplications in relation to the financing of individual activities developed in the network's sites and financed by different instruments.

The **main principles on which the differentiation of activities was based** were the following:

- The activities pertaining to the site protection regime (management agencies, studies, operational plans, etc.) as well as to the implementation of pilot projects will be financed by ERDF programmes.
- The activities pertaining to the implementation of farming and forestry practices through the SAPS scheme are co-financed by the EAFRD.
- Actions for the protection and study of specific species will be financed by the ERDF.

- Actions for the protection of species through the application of agri-environmental and forestry-environmental measures are exclusively co-financed by the EAFRD, whereas
- Infrastructures facilitating access, encouraging visitability, actions for the restoration of habitats or species will be co-financed by the ERDF.

The differentiation of activities in the sites of the **Natura 2000** network is recorded in Table 42 below:

TABLE 2: CLASSIFICATION / DIFFERENTIATION OF NATURA 2000 ACTIVITIES

CATEGORIES OF NATURA 2000 ACTIVITIES	ERDF	EAFRD	Comments
Management of the selection process	+		
Scientific studies / Register for the definition and designation of sites	+		
Preparation of initial Information & Publicity Material	+		
Pilot projects	+		
Preparation of Management Plans & Strategies	+		
Creation of Management Agencies or other management schemes	+		
Consultation and networking – Public meetings, networking, liaison with landowners	+		
Elaboration and Revision of Management Plans & Strategies	+		
Operating expenses of Management Agencies or other management schemes	+		
Maintenance of public facilities – Access and use of sites	+		
Operating expenses for Personnel	+		
CATEGORIES OF NATURA 2000 ACTIVITIES	ERDF	EAFRD	Comments
Protection management - Habitats			
Aid to farmers in disadvantaged mountain areas		+	
Aid to farmers in disadvantaged areas, except mountain regions		+	
Natura 2000 aid and aid linked to Directive 2000/60		+	
Agri-environmental aid		+	
Support to non-productive investments (farmlands)		+	
First afforestation of farmlands		+	
First establishment of agri-forestry systems on farmlands		+	
First afforestation of non-agricultural land		+	
Natura aid (forests)		+	
Forestry-environmental aid		+	
Restoration of forestry resources & preventive actions		+	
Support to non-productive investments (forests)		+	

CATEGORIES OF NATURA 2000 ACTIVITIES	ERDF	EAFRD	Comments
Preservation and upgrading of agricultural heritage		+	
Protection management - Species	+		
Protection management - Species, through agri-environmental and forestry-environmental measures		+	
Protection management – Invading foreign species	+		
Implementation of Management Plans and Agreements	+		
Provision of services and loss of income from farming activities		+	
Monitoring and surveillance	+		
Risk management	+		
(On-going) site surveillance	+		
Provision of national and regional range information and publicity material	+		
Provision of local range information and publicity material		+	
Education and training in Natura sites provided by Management Agencies	+		
Facilities encouraging visitors' use and appreciation of Natura 2000 sites	+		
Land purchase, including indemnities for development rights	+		
Infrastructure needed for the restoration of habitats or species	+		
Infrastructure needed for the restoration of habitats or species through agri-environmental and forestry-environmental measures		+	
Public access infrastructure	+		
Public access infrastructure (rural roadworks)		+	

Within the framework of the new programming period, a Special Service is created to coordinate actions in the sector of the environment. The role and competences of the Special Service are described in detail in the NSRF. The creation of the Special Service is not only expected to ensure that there will be no overlapping but also that it will contribute to attain the maximum degree of synergy and complementarity of actions in the sector of the environment, regardless of the source of financing (Fund).

3.5.2.4.3 The environment within the framework of fisheries

To the extent that the sustainable management of areas depending on fisheries and the protection of the environment constitute major strategic objectives of the Common Fisheries Policy and of the National Strategic Plan for the Development of Fisheries (ESSAAL) in the 4th Programming period, almost all the actions provided for in the framework of the operational programme are actions for the environment.

Namely, **environment-oriented actions to be exclusively financed by the O.P. Fisheries** are those actions that are provided for in the EFF regulation and include:

- Implementation of aquaculture methods substantially reducing negative impact or enhancing positive effects on the environment when compared with normal practice in the aquaculture sector
- Support for traditional aquaculture activities important for preserving and developing both the economic and social fabric and the environment.
- Forms of aquaculture most likely to improve the environment, natural resources, genetic diversity, and management of the landscape and traditional features of aquaculture zones.
- sustainable aquaculture compatible with specific environmental constraints resulting from the designation of NATURA 2000 sites in accordance with Council Directive 92/43/EEC.
- Viable contribution to a better management or protection of fishing resources.
- Actions directly related to fishing activities for the protection and enhancement of the environment within the framework of the Natura network, except operational expenses.
- Protecting the environment in small fisheries areas to maintain their attractiveness, regenerating coastal hamlets and villages and protecting and enhancing the natural and architectural heritage.
- For the development, restructuring or upgrading of aquaculture zones, support is granted to the Management Agencies of Organized Aquaculture Development Areas (Law 2742/1999 & Ministerial Decision H.Π.17239 / 30.8.2002), towards the implementation of actions of collective nature, particularly for the procurement of collective equipment monitoring water quality features in Organized Aquaculture Development Areas and dealing with extraordinary cases of pollution, carrying out relevant studies, etc.
- Within the implementation framework of Regulation 1967/2006, concerning management measures in the Mediterranean, aid is granted for:
 - (i) the collection of scientific information serving the mapping of habitats to be protected (*Posidonia oceanica*) in accordance with article 4 of the Regulation,
 - (ii) the collection of scientific information serving the scientific identification and mapping of areas (national protected areas) to be protected within the framework of article 7 of the Regulation, and
 - (iii) the scientific monitoring of management plans, in accordance with articles 18 and 19 of the Regulation.

3.5.2.5. Interventions on the production environment

Interventions on the production environment, **within the implementation framework of axis 3 of the RDP**, pertaining to the differentiation of rural economy and the improvement of the quality of life in rural areas, are linked to measures which include:

- differentiation towards non-farming activities
- support to the creation and development of micro enterprises (as defined in the Commission's recommendation 2003/361/EC)
- encouraging tourist activities.

Differentiation criteria, terms and conditions for interventions by farmers and non-farmers in the areas of implementation of Axis 3 of the RDP are defined below.

3.5.2.5.1 Differentiation towards non-farming activities – Investments by farmers

Farmers, as defined by the national institutional framework in force, individuals insured with the Organization for Agricultural Insurance (OGA) and the members of their households, **can be financed only by the EAFRD (according to Regulation 1698/2005) for the creation, modernization and expansion of micro enterprises, in line with Commission's recommendation 2003/361/EC.**

Indicative actions are:

- Small capacity (up to 40 beds) accommodation facilities
- Restauration and recreation areas
- Visitable farms
- Service provision enterprises catering to countryside tourism (e.g. alternative forms of tourism, special forms of tourism, playgrounds, food-and-wine tasting areas, etc.)
- Cottage industry, handicrafts, production of traditional art, manufacturing units
- Service provision enterprises
- Food production enterprises after initial processing
- Improvement of enterprises towards the protection of the environment, in addition to what is provided for in the legislation (e.g. photovoltaic systems, biomass exploitation for own use, RES, geothermal energy, etc.).

Actions will be also co-financed for the introduction of quality assurance systems and for the acquisition of quality labels.

Farmers' investments in tourism are exclusively financed by the EAFRD, up to a total budget of 600.000 euro. Higher budget investments in the tourism sector will be co-financed by the ERDF.

Furthermore, **farmers' interventions in processing and services** are exclusively financed by the **EAFRD**, up to a total budget of **300.000 euro**. Higher budget investments in the sectors of processing and services will be co-financed by the ERDF.

3.5.2.5.2 Differentiation of rural economy / Investments by non-farmers

The following basic principles govern the differentiation criteria for investments **by non-farmers**, as defined above, in the **sectors of manufacturing/processing, commerce, services and tourism**:

- ☒ **Geographic criterion.** In mountainous and disadvantaged areas (according to Regulation 1698/05) where Integrated Rural Development Programmes will be implemented and which will be determined after the joint examination of a series of parameters, respective investments will be financed by the EAFRD. EAFRD financing does not include municipal departments with more than 3,000 inhabitants.
- ☒ **Budget height.** In the above mentioned areas, **EAFRD-backed interventions in processing and services will not exceed 300.000 € (total budget). Investments in tourism for the accommodation creation and modernization with capacity increase (building an extra floor or extension) in the same areas are exclusively financed by the EAFRD for a total budget of up to 600.000€.**
- ☒ **Sectoral criterion.** The specialization of this criterion in the processing, commerce and services sectors is presented in table 3 below, which lists the sectors/interventions to be exclusively co-financed by the EAFRD.

Code STACOD ⁷	SECTOR'S NAME
153.3	Production of fruit and vegetable-based confectionery
158.1	Bakery, production of fresh pastry products
158.2	Production of crackers, cookies, long-preservation pastry products
158.4	Production of cocoa, chocolate and confectionery
158.5	Production of pasta, lasagne, couscous and similar flour products
158.6	Processing of tea and coffee
158.9	Production of other foodstuff

⁷ Statistical classification of Economic Activity Sectors, National Statistical Service of Greece.

Code STACOD ⁷	SECTOR'S NAME
159.1	Production of distilled liquor
172	Weaving mills
175.1	Carpet weaving mills
182.1	Manufacturing of work clothes
192.0	Manufacturing of travel accessories, bags and similar goods, saddlery and leatherwork
201.0	Wood sawing, planning and impregnation
203.0	Manufacturing of wood products for the construction industry
205.2	Manufacturing of cork products and wickerwork and basket-weaving products
212.1	Manufacturing of undulated paper and cardboard and paper and cardboard packaging materials.
241.4	Production of other basic organic chemical substances (charcoal production)
245.1	Production of soaps and detergents, cleaning and varnishing products
246.3	Production of essential oils
261.3	Manufacturing of concave glass
262.1	Manufacturing of ceramic products for domestic use / for decoration
262.5	Manufacturing of other ceramic products
286.1	Manufacturing of cutlery
286.2	Manufacturing of tools
293.9	Manufacturing of other farming and forestry machinery
361.1	Manufacturing of chairs and seats
361.2	Manufacturing of other office and shop furniture
361.3	Manufacturing of other kitchen furniture
361.4	Manufacturing of other furniture
362.9	Manufacturing of jewels and related goods
363.0	Manufacturing of musical instruments
521.2	Grocery stores
522.5	Retail trade in liquors and other beverages

Code STACOD ⁷	SECTOR'S NAME
525.5	Retail trade in souvenirs and folk handicrafts
528.1	Repair of shoes (any type) and other leather goods
923.1	Artistic and literary production and interpretation
923.2	Exploitation of entertainment halls and related activities
923.3	Outdoor entertainment events and recreation parks
930.1	Washing and dry-cleaning of textile and fur goods
930.2	Hairdresser, barber activities
930.4	Activities related to physical well-being

3.5.2.6. Differentiation criteria for the actions to be implemented within the framework of the Rural Development Programme 2007-2013 (RDP) and of the Operational Programme Fisheries 2007-2013

Interventions aiming at the economic differentiation of rural and fishing areas will be implemented through the **Rural Development Programme 2007-2013, specifically Priority Axes 3 and 4, and through the O.P. Fisheries 2007-2013, Priority Axis 4: «Sustainable development of fishing areas».**

In order to avoid overlapping and to ensure complementarity between Funds, the following differentiation criteria will be used for the actions that will be implemented within the framework of the two Programmes.

Priority Axis 4 of the Rural Development Programme 2007-2013 «LEADER Approach» and Priority Axis 4: «Sustainable development of fishing areas» of the O.P. Fisheries 2007 – 2013

The two Priority Axes are implemented through **Local Development Strategies** submitted by Local Action Groups within a bottom up approach.

The areas to be included in RDP Priority Axis 4 and in O.P. Fisheries Priority Axis 4 will be differentiated according to geographic criteria.

Priority Axis 3 of the Rural Development Programme 2007-2013 «Quality of Life in rural areas and differentiation of rural economy» and Priority Axis 4: «Sustainable development of fishing areas» of the O.P. Fisheries 2007 – 2013.

The interventions under Priority Axis 3 of the RDP may be implemented in areas which fall also under Priority Axis 4 of the O.P. Fisheries . In these cases, the financing of operations follows the following differentiation criteria:

- **In the case of public works**, Priority Axis 4 of the O.P. Fisheries finances exclusively projects mentioned **by name and by priority** in the Local Programmes to be submitted for inclusion in the Priority Axis by the Fishing Areas Local Action Groups. Other public works in the same areas may be financed by Priority Axis 3 of the RDP «Quality of Life in rural areas and differentiation of rural economy»
- **Private investments in these areas** are financed by Priority Axis 4 of the O.P. Fisheries until its budget has been used up, for each area of intervention.

3.5.2.7. Horizontal distribution

The condition of application of criteria *until exhaustion of the available budget* (on the basis of the completion of the proposal submission procedure within the framework of the relevant tenders) is valid for all the criteria listed in the present chapter of the Programme. In the event the budget is used up, the competent Managing Authority informs the coordination mechanism which in turn ensures the relevant lifting of criteria as the case may be.

Finally, taking into consideration the fact that the implementation of programmes is a dynamic process covering at least a period of 7 years, the differentiation criteria may be complemented and/or revised should this be deemed necessary.

3.5.3 In relation to the Measures of Axis 4 of the RDP

Priority Axis 4 of the 2007-2013 Rural Development Programme 'LEADER Approach' and Priority Axis 4 'Sustainable Development of Fisheries Areas' of the OP 'Fisheries' 2007-2013

The two Priority Axes of the RDP and the OP 'Fisheries' 2007-2013 are being implemented through Local Development Strategies submitted by Local Action Groups on the basis of the bottom up approach.

The areas that will be included in Priority Axis 4 of the RDP and Priority Axis 4 the OP 'Fisheries' 2007-2013 will be geographically different.

Within the framework of Axis 4, inter-territorial and transnational cooperation plans that concern at least one Local Action Group selected within the framework of Axis 4 are being implemented. These plans may concern the implementation of actions related to one more objectives of the RDP.

The differentiation between the EAFRD and the other structural funds will be specific within the framework of the coordination mechanism.

3.5.4 Coordination of the OP of the NSRF with the EAFRD & the EFF

In order to coordinate the OPs of the NSRF with the EAFRD and the EFF, a mechanism to promote complementarity of actions is being established within the framework of the National Coordination Authority, in cooperation with the competent policy-making agencies, territorially (intervention area) and thematically (intervention area), operating at the level of a) Programming b) Monitoring of implementation (Managing Authorities) and c) Strategy Review (National Coordination Authority and Managing Authorities of the RDP and the OP Fisheries).

At the first level, this mechanism specifies directions to ensure complementarity and differentiate actions and coordinates their framework of implementation, both thematically and geographically.

At the second level, the Managing Authorities (MA) of the OPs of the NSRF, the RDP and the OP Fisheries observe the directions during the process of selecting co-financed operations. They prepare a special report on the progress and effectiveness of the actions on an annual basis, using thematic and spatial dimension codes and communicating them to this mechanism.

4. IMPLEMENTATION PROVISIONS

1. COORDINATION, MANAGEMENT AND AUDIT – AUTHORITIES AND AGENCIES

Pursuant to the requirements of Reg. (EC) 1083/2006, as amended and in force, for each operational programme (OP) a managing authority is appointed, as well as a certifying authority and audit authority; intermediate bodies are also defined which will be appointed to manage the programme. For the joint management and control system of the OPs of the National Strategic Reference Framework (hereafter referred to as the NSRF), a national coordinating authority is appointed to ensure necessary coordination of implementation of the OPs and attainment of the objectives of the NSRF. The national coordinating authority cooperates with the special coordination and monitoring service for ESF actions of the Ministry of Labour, Social Security and Welfare on issues relating to the ESF. The precise definition of the responsibilities, the necessary separation of duties and the mode of organization and operation of these authorities and agencies are defined by law and with individual regulatory instruments. The responsibilities for management, certification and audit are exercised through discrete services in order to preserve the necessary separation of duties among these authorities.

The national coordinating authority, the special service for coordination and monitoring of ESF actions and the managing authorities of the OPs form a network whose goal is close cooperation, immediate updating and transfer of the good practices developed.

A detailed description of the mode in which the duties of each authority and agency involved in the management and audit of the OP are carried out will be offered in the description of the joint OP Management and Control System forwarded to the Commission pursuant to article 71 of Reg. (EC) 1083/2006.

The Ministry of Development, Competitiveness, Infrastructure, Transport and Networks represents the Greek authorities in dealings with the Commission in matters relating to the NSRF. In matters concerning the OPs it represents the Greek authorities in association with the other competent ministries. The managing authority is responsible to the Commission for matters relating to the Operational Programme.

1.1 National coordinating authority for development programmes 2007-2013

The national coordinating authority is responsible for coordination planning and implementation of the OPs in the context of the NSRF and for guiding the managing authorities, in order to ensure their effectiveness and legitimate management and implementation. In this context the national coordinating authority:

- (i) monitors and coordinates planning and implementation of the NSRF and the OPs within it, setting directions for their compatibility with national policies and the policies and priorities of the European Union,
- (ii) is responsible for designing the Managing and Control System, communicating it to the Commission, supervision of its effective implementation and adaptation in order to ensure attainment of its objectives,
- (iii) coordinates the managing authorities of the NSRF Ops, issues instructions and sets directions relating to the planning, management and definition of the OPs, evaluation, verification and any activity falling within the remit of the OP managing authorities,

- (iv) supplies necessary information to the Joint Ministerial Committee for community programmes set up under article 20 of Law 3483/2006 and to the conference of chairmen of OP monitoring committees, and takes steps to ensure implementation of their decisions,
- (v) cooperates with the managing authorities of the NSRF OPs, the certifying authority, the audit authority and the agency responsible for running the MIS, to ensure that the Management Information System (MIS) responds to the management, monitoring, audit and evaluation requirements of the NSRF OPs, and for briefing the Commission,
- (vi) provides instructions and sets directions for conducting of evaluations associated with the monitoring of OPs, pursuant to the provisions of articles 47 and 48 of Reg. (EC) 1083/2006, as amended and in force, and sub-chapter 3 of this document, processes the findings of the evaluations and sets directions for the managing authorities in respect of the revision of the OPs,
- (vii) briefs the managing authorities on community and national law, monitors and informs itself of the relevant measures taken by the managing authorities to ensure compatibility of the interventions with national and community law, particularly in relation to compliance with provisions on competition, public contracts, environmental protection, elimination of inequalities, promotion of gender equality and the principle of non-discrimination on grounds of gender, race or ethnic origin, religion or beliefs, disability, age or sexual orientation, and recommends to the Joint Ministerial Committee the taking of suitable measures for effective implementation of these principles,
- (viii) is responsible for managing the national contingency reserve, pursuant to article 51 of Reg. (EC) 1083/2006,
- (ix) establishes and monitors the framework of principles of publicity and information for the OPs co-financed by the Structural Funds and the Cohesion Fund (hereinafter Funds), in order to ensure homogeneity, cohesion and coordination of publicity and information measures of the NSRF OPs, and takes measures necessary for the monitoring of and compliance with this framework,
- (x) provides directions for the preparation of the annual OP implementation reports and attends annual meetings of the managing authorities of the OP and the Commission, as envisaged in articles 67 and 68 of Reg. (EC) 1083/2006, annual meetings of the Rural Development programme, as envisaged in article 83 of Regulation 1698/2005, as well as the operational programme Fisheries, as envisaged in article 69 of Regulation 1198/2006,
- (xi) monitors compliance with commitments on additionality and provides the Commission with the necessary information for verification, pursuant to the provisions of article 15 of the Regulation,
- (xii) ensures the NSRF is coordinated with the policies of the National Reform Programme (NRP), as well as the applicable legislative commitments that are connected to requirements for the fiscal adjustment of the country, such as the Medium-term Fiscal Strategy Framework (MFSF). Submits the necessary data relating to the contribution of the OPs co-financed by the Funds to the implementation of the NRP, so that they can be included in its annual implementation report as required under article 29 para. 1 of Reg. (EC) 1083/2006, as well as the corresponding data concerning the implementation of the MFSF and other legislative commitments.

- (xiii) compiles the strategic monitoring reports of the NSRF, as required under paras. 2 and 3 of article 29 of Reg. (EC) 1083/2006, relating to the contribution of the OPs co-financed by the Funds to the attainment of the objectives of the policy for cohesion, as defined in the Treaty, the objectives of the Funds, as defined in Regulation (EC) 1083/2006, the priorities formulated in the strategic guidelines for cohesion as defined in the NSRF, and the objective of promoting competitiveness and employment,
- (xiv) ensures, in association with the managing authorities of the Rural Development programme and the OP Fisheries, coordination between the contribution of the various Funds, the EAFRD and the EFF, and coordination between the Funds and the interventions of the European Investment Bank and other funding instruments,
- (xv) is responsible for ensuring allocation of Fund resources by type of Region (Exclusively Convergence Objective, Phasing Out, Phasing In)
- (xvi) ensures the programming and coordination of the implementation of co-financed actions of State aid, financing tools and loans from the EIB, in cooperation with the special committee of paragraph 4.1.2.6,
- (xvii) ensures the observance of the Community institutional framework concerning awards and operates an information system for monitoring the accumulation of state aid,
- (xviii) establishes the system for verification of managerial competence of the beneficiaries, with the exception of those which receive state aid under articles 87 and 88 of the Treaty and the financial engineering instruments (funds), provides instructions and oversees correct and unified implementation of the system,
- (xix) establishes, in association with the certifying authority, the rules on eligibility of spending, and issues instructions in support of the managing authorities and beneficiaries,
- (xx) establishes and operates thematic networking in order to explore and disseminate good practices and proposals for simplification and reduction of red tape,
- (xxi) organizes and operates electronic networking of all the managing authorities, as well as the special coordinating services, in order to ensure rapid and efficient provision of information and adoption of best practices in the tackling and resolution of common issues,
- (xxii) supports the mission and the proceedings of the conference of OP monitoring committee chairmen, of the NSRF, of the Rural Development Programme and of the OP Fisheries,
- (xxiii) takes necessary steps to monitor the progress/implementation of the intervention earmarking associated with the Lisbon Strategy pursuant to article 9.3 of Reg. (EC) 1083/2006,
- (xxiv) monitors implementation of the policies relating to poles of development, as set out in the NSRF and the OPs 2007-2013.

The national coordinating authority is responsible for coordinating and guidance of the managing authorities of the NSRF OPs, without replacing them in the exercise of their duties.

Exercise of the responsibilities set out above is the province of special services subject to the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks.

1.2 Basic coordination mechanisms

Apart from the national coordinating authority, which coordinates all the managing authorities on issues of implementation of the NSRF and the OPs of the NSRF, as prescribed in sub-chapter 1.1, individual mechanisms are also established for coordination of actions in specific sectors, in order to ensure the affinity of the co-funded actions with national policies for each sector, and between the interventions of the EAFRD, EFF, EIB and other existing funding instruments.

To this end the coordinating mechanisms:

- (i) determine priorities, in collaboration with the national coordinating authority, and set directions for the implementation of the national sectoral policies,
- (ii) cooperate with the competent managing authorities and national coordinating authority in incorporating in the OPs the policy directions in their own area of competence,
- (iii) monitor progress and efficacy of actions and their contribution to the attainment of the objectives set,
- (iv) proceed to make the necessary proposals for revision of directions, where necessary.

1.2.1 Coordination of ESF actions

A. Coordination of actions co-financed by the ESF or the ERDF, within the framework of Article 34(2) of Regulation (EC) 1083/2006 (flexibility clause) is the responsibility of the Special Service for Coordination and Monitoring of ESF Actions (EYSEKT) of the Ministry of Labour, Social Security & Welfare, in cooperation with the national coordinating authority and the competent national authorities.

Specifically, EYSEKT:

- (i) Carries out coordination and monitoring duties in respect of the actions co-financed by the ESF or the ERDF, within the framework of Article 34(2) of Regulation (EC) 1083/2006 (JMD No. 36952/1275, GGI 986 B/28.5.2008), as in force.
- (ii) Monitors national, European and international developments and policies in relation to issues associated with employment, social inclusion, lifelong learning, promotion of gender equality and equal opportunities, as well as the impact of other policies (national, EU, international), and participates in relevant trans-national thematic networks, partnerships with European and International agencies and the competent EU committees. Monitors the implementation of employment and social inclusion policies and contributes to their planning.
- (iii) Monitors regional allocation of ESF funds by OP/action and type of Region (Exclusively Objective 1, Phasing Out, Phasing In).

- (iv) Prepares the necessary statutory and regulatory framework governing the implementation of actions co-financed by the ESF, where necessary, in collaboration with the national coordinating authority, the managing authorities of the OPs and the competent ministries, in order to ensure standard, uniform implementation of actions of the same type. Within this context it also issues instructions and sets directions, in association with the competent agencies.
- (v) Monitors and processes funding flows and overall commitments of the ESF operational programmes to ensure timely identification of any problems, and – in collaboration with the national coordinating authority – recommends appropriate corrective measures to the relevant monitoring committees in order to avoid application of the automatic de-commitment $n+3/n+2$ rule.
- (vi) Is responsible for provision of directions for the monitoring of ESF type actions co-financed through use of the 10% (or 15%) flexibility clause in all OPs involved, in order to avoid overlapping and achieve synergies.
- (vii) Issues instructions and sets directions for planning and amendment of indicators and for issues of evaluation more generally, involving ESF interventions on the level of the NSRF and the OPs, in association with the national coordinating agency and the competent agencies. Takes measures to ensure compatibility of the above with the policies of the European Strategy on Employment and the related targets of the Community in the areas of social inclusion, education, training and equality.
- (viii) Monitors and coordinates the *ex ante* evaluation and the evaluations conducted during the programme period on the level of the NSRF and the OPs co-financed by the ESF, in collaboration with the competent agencies.
- (ix) Coordinates the competent national agencies and cooperates with the European Commission in preparing the evaluations in respect of human resource issues, carried out at the responsibility of the European Commission, pursuant to article 49 of Regulation (EC) 1083/2006, as amended and in force.
- (x) Participates in framing of plan for evaluations over the period 2007-2013 in respect of human resource issues, in association with the managing authorities of the ESF OPs and the national coordinating authority.
- (xi) Organizes, coordinates and monitors the information and publicity actions for promotion of the policies and interventions of the ESF in Greece, in order to ensure synergy of the communication actions among the OPs, and their complementarity with the NSRF communication actions. It cooperates to this end mainly with the competent services of the Directorate General for Employment of the European Commission, the national coordinating authority, the competent national authorities and the managing authorities on all issues involving communication actions for the ESF.
- (xii) Develops auxiliary tools in association with the competent national authorities for support of the managing and implementation agencies, and takes necessary steps to prepare studies, research, expert opinions and evaluation related to human resource issues involved in execution of its responsibilities.

Measures are taken to ensure adequate staff levels are available to allow EYSEKT to carry out its duties. Also, in the managing authorities of the Regional OPs, and the OPs implementing ESF type actions using the 10% (or 15%) flexibility clause, an officer or officers is appointed exclusively responsible for managing ESF operations and for cooperation with

EYSEKT and the managing authorities of the competent ministries in issues related to their responsibilities.

B. Horizontal and vertical mainstreaming of the EQUAL principles will be ensured through the Special Service for Social Inclusion and Social Economy, which performs the duties of the Special Service for the Mainstreaming of the Authorities of the Community Initiative EQUAL in the OPs of the ESF of the 2007-2013 Programming Period. This special service will identify opportunities for mainstreaming of EQUAL principles in the actions of the OPs, and will provide the necessary expertise in this area through recommended expert opinions. It also carries out monitoring activities and offers guidance on correct implementation of EQUAL principles (JMD No. 17723/oik.4376 (GGI B' 1403) on the amendment and codification of JMD No. 180691/7.2.2001/3rd CSF (GGI B 148).

C. The existing Special Implementation Services that operated in the context of the 3rd CSF at the Ministries of Employment and Social Protection, Education and the Interior will continue to operate during the programming period 2007-2013.

D. The not-for-profit broader public sector company 'Information Society S.A.', the main mission of which is to develop actions and support the competent bodies in order to improve the administrative competence of public administration, as well as the execution and management of projects in the sector of IT, communication and new technologies for public administration, will contribute towards supporting the effective implementation of the OP «Administrative Reform».

E. To support effective implementation of the Axis «Systemic Priorities» of the OP «Development of Human Resources», a structure will be set up at the Ministry of Employment and Social Protection, within the General Secretariat for Management of Community and Other Resources, for the design, organization and monitoring of implementation and evaluation of the actions in the Axis in question (JMD 4043/169/GGI 209 B/9.2.2009).

1.2.2 Coordination of actions in the environmental sector

Coordination of actions in the environment sector is the responsibility of the Special Service for the Coordination of Environmental Actions at the Ministry of the Environment, Energy & Climate Change (YPEKA), which coordinates, sets priorities and monitors, in association with the national coordinating authority, the totality of environmental projects and actions, regardless of their source of funding, in order to ensure the necessary synergy and complementarity of the interventions in this sector. It will also work with the national coordinating authority on incorporating the directions for implementation of environmental policy within the regional OPs. The Special Service was established by virtue of JMD 19883/2008 (GGI B 1957/23.9.2008).

This special service supports and coordinates the workings of the Environmental Network, in collaboration with the National Centre for the Environment and Sustainable Growth (EKPA) and the other Services of YPEKA and the competent Central and Regional Authorities; it compiles annual performance reports on the progress of environmental projects and actions, which it forwards to the national coordinating authority and the competent departments of the European Commission; it processes data and compiles reports assisting the Monitoring Committee of the OP 'Environment – Sustainable Development' and the Annual Conference of Monitoring Committee Chairmen; it attends the Monitoring Committees of the OPs and supports YPEKA and other public authorities in necessary, ongoing consultation with the Social Partners and Environmental NGOs on related issues.

The special service also receives the reports envisaged in the joint ministerial decision approving the OP Strategic Environmental Impact Study and concerning the monitoring of the significant environmental effects of the implementation of the OP.

1.2.3 Coordination of actions in the health and social solidarity sector

Coordination of actions in the health and social solidarity sector is the responsibility of the Ministry of Health, and is exercised through:

A. The Committee Coordinating and Monitoring the Strategic Priorities of the Operational Programmes of the NSRF in the sector of Health and Social Solidarity, which is a Joint Ministerial Body under the chairmanship of the General Secretary of the Ministry of Health. This Committee determines on the strategic, executive level the necessary interventions in sectoral and regional OPs and the priorities for the totality of projects and actions, regardless of their source of funding, in order to ensure the necessary synergy and complementarity of the interventions. The Committee was established by virtue of JMD 5237/2008 (GGI B 1637).

B. The Special Service of the Health and Social Solidarity Sector. This structure supports the joint ministerial body on issues involved in drawing up the strategy, and coordinates implementation of the actions in the health and social solidarity sector to be implemented by OPs in the NSRF. This coordination involves issuing instructions and directions for planning and modification of OP interventions with the consent of the national coordinating authority and the competent authorities involved. The special service that exercised management duties for the 2000-2006 programming period was restructured by virtue of JMD 4088 (GGI B 278).

The special service has also undertaken the duties of an intermediate body for the actions of the OP Human Resources Development 2007-2013, which mainly concern the establishment of reform in the Mental Health sector, the development of Primary Health Care and the protection of public health.

1.2.4 Coordination of ERDF actions in the education sector

Coordination of ERDF actions in the education sector being implemented by NSRF regional OPs and the OP 'Digital Convergence' is exercised by the managing authority of the OP 'Education and Lifelong Learning' (JMD 6472/2008 /GGI B 636).

1.2.5 Coordination of the OPs 'Administrative Reform' and 'Digital Convergence'

To coordinate implementation of the OPs 'Administrative Reform' and 'Digital Convergence' in the NSRF 2007-2013 a joint ministerial committee has been set up, involving the Secretaries responsible for the competent managing authorities, as well as representatives of the national coordinating authority, the competent secretaries general of the competent ministries, as well as the heads of the competent special services. The remit of the committee is to coordinate the two OPs in planning the calls for actions and implementing the complementary interventions. A joint decision of the Minister for Economy and Finance and the Minister of Interior, Public Administration & Decentralisation (JMD 151.993/PS3598/13.05.2010 /GGI B 794) established the aforementioned committee and set its more specific duties.

1.2.6 Coordination of co-funded actions involving state aid, financial engineering instruments and EIB loans

To coordinate the planning and implementation of co-funded state aid actions, including the rules on accumulation of aid and avoidance of duplicate funding of spending by other community or national funding instruments, or another programme period, a committee has been set up (JMD 35544/GDAAP 5379/2008 /GGI B 1691) involving the head of the national coordinating authority (chairperson), the heads of the managing authorities of the OP 'Competitiveness and Entrepreneurship', 'Digital Convergence', the managing authority of the OP 'Development of Human Resources' and the ROPs, as well as the heads of the special service for coordinating the monitoring of ESF actions, the managing authority of the RDP and the managing authority of the OP Fisheries. Representatives of other agencies may attend the meetings of the committee as appropriate.

This committee also supports the national coordinating authority in overseeing the organization and management of the funds established, organized and operating pursuant to article 44 of Regulation (EC) 1083/2006.

Coordination of loans provided by the EIB to finance major projects included in the OPs (including major projects being promoted with private sector co-funding) or other smaller-scale investments is the responsibility of the competent services of the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks and the Ministry of Finance, working together with the above committee and the competent managing authorities.

1.2.7 Coordination and promotion of Research and Technology

Coordination of actions and interventions for Research and Technology is the responsibility of the General Secretariat for Research and Technology, which is the agency authorized to frame and implement policy in these areas.

1.2.8 Coordination of actions in the cultural sector

Actions in the cultural sector will be coordinated by the special service of the cultural sector, which is attached to the Ministry of Education, Religious Affairs, Culture & Sports.

1.2.9 Coordination of NSRF OPs with the EAFRD and EFF

Coordination between the OPs of the NSRF and the programmes funded by the EAFRD and EFF is the responsibility of the national coordinating authority and the special managing services of the Rural Development Programme and OP Fisheries, working together with the competent national authorities in planning and monitoring implementation of the corresponding actions.

The coordination is achieved through a mechanism to promote the complementarity of the actions, both spatially (intervention region) and thematically (intervention sector), which operates on the level a) of planning, b) of monitoring of implementation (managing authorities), and c) review of strategy (national coordinating authority and managing authorities of the Rural Development Programme and OP Fisheries).

On the first level the mechanism defines directions to ensure complementarity and separation of actions, and coordinates their framework of implementation in thematic and geographical terms.

On the second level the managing authorities of the NSRF OPs, the Rural Development Programme and OP Fisheries follow the directions laid down in the process of selection of co-funded operations. On an annual basis they compile a special report on the progress and effectiveness of the actions, using thematic and territorial dimension codes, and communicate these reports to the mechanism.

On the third level, and in the context of the above special report, the mechanism examines the progress and effectiveness of the actions, defines any need for revision of the directions and allocation of community resources arising from changes in the priorities (community, national, regional) or conditions of implementation, and recommends measures to the Annual Conference of Monitoring Committee Chairmen.

1.3 Operational Programme Managing Authority

The special managing service that operated in the context of the CSF 2000-2006 has been appointed managing authority for the OP 'Competitiveness and Entrepreneurship' pursuant to article 59 par. 1 of Reg. (EC) 1083/2006 was renamed as the Special Service for Management of the OP 'Competitiveness and Entrepreneurship' and is attached to the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks.

Pursuant to article 60 of Reg. (EC) 1083/06, the managing authority is responsible for the management and implementation of the OP in accordance with the principles of sound financial management and will exercise the following duties:

- (i) Ensuring that the OP evaluations set out in Article 48(3) of Regulation (EC) 1083/2006 are carried out in accordance with the provisions of Article 47 of the same Regulation,

In this context, the managing authority:

- prepares and organizes the evaluations envisaged in sub-chapter 4 of the same chapter during the programming period, taking the particular measures necessary for the execution of the assessments in accordance with the instructions and directions of the national coordinating authority,
- organizes the production and collection of the data necessary for carrying out the evaluations, including the various types of information provided by the monitoring system,
- communicates the evaluation results to the national coordinating authority and EYSEKT, provided the OP is co-funded by the ESF or implements ESF-type actions through use of the 10% (or 15%) flexibility clause, and to the monitoring committee and the Commission,
- ensures the appropriate publication of the evaluation results, on the basis of the rules that concern access to documents,
- cooperates with the Intermediate Management Bodies of sub-chapter 1.4 for the utilization of the evaluation conclusions,

- (ii) Ensuring that the certifying authority receives the necessary information concerning processes and verifications for certification purposes,

In this context, the managing authority:

- takes the measures necessary for the timely updating of the MIS with all the data necessary for the certifying authority to carry out the necessary controls for expenditure certification,
- cooperates with the certifying authority in order to clarify any issue that emerges in regard to the certification of approved expenditures,

- (iii) Ensuring compliance with the information and publicity requirements set out in Article 69 of Regulation (EC) 1083/2006,

In this context, the managing authority:

- prepares a communication plan for the OP in accordance with the provisions of Article 2(2) of Regulation (EC) 1828/2006 and the framework of publicity and information principles prepared by the national coordination authority, in cooperation with EYSEKT, provided the OP is co-funded by the ESF or implements ESF-type actions through use of the 10% (or 15%) flexibility clause, which is finalized with the consent of the Commission,
- implements the actions set out in the approved communication plan, notifies the OP monitoring committee and the Commission to that effect and assesses the effectiveness of the actions, in accordance with Article 4 of Regulation (EC) 1828/2006,
- monitors the progress of the implementation of the publicity actions (this implementation is carried out by intermediate management bodies),
- informs the beneficiaries of the publicity actions they must undertake in the context of execution of operations and monitors the proper observance of their obligations,

- (iv) Ensuring selection of the operations to be funded in line with the criteria applied under the OP, and ensuring compliance of the co-funded operations with the current community and national rules, throughout the whole period of their implementation,

In this context the managing authority is responsible for:

- Providing – by means of invitations to submit proposals – potential beneficiaries with detailed information on:
 - The conditions of eligibility the proposed operations must meet to be included for funding in the OP,
 - The standard forms to be used in submitting applications for funding,
 - The procedures for examination of the funding applications and the relevant time periods,
 - The criteria for inclusion of the operations to be funded,

- The contact persons on the national, regional or local level who can provide information on the OP,
 - Publication of a catalogue listing the titles of the operations, the beneficiaries and the amount of public funding granted.
- Implementing evaluation procedures for the operations, based on the inclusion criteria approved by the OP monitoring committee. Proposals which have not been evaluated or have not received positive evaluation cannot be included in the OP. Sets of criteria which may be used include the feasibility of the operation, the compatibility of the operation with national and community policies, the contribution of the operation to the objectives of the OP, the nature and kind of the operation in the context of the call being put out, the fullness and maturity of the operation.
 - The evaluation also examines the managerial competence of the beneficiaries, excepting those receiving state aid under articles 87 and 88 of the Treaty, in accordance with the system defined in paragraph (xvii) of sub-chapter 1.1, before the decision is taken to include the operation in the OP.
 - In the case of operations in respect of which, at the date of submission to the OP, legal commitments have been entered into, or which are being implemented or have been completed after the date of commencement of eligibility, the evaluation will take account of any previous evaluations conducted by competent authorities and will ensure that the selection of the operations meets the criteria being applied in the OP.
 - Issuing the inclusion decision for operations in the OP and informing the beneficiary in writing of all the obligations it is undertaking. It will also inform in writing, with adequate reasons, those agencies whose proposals were not accepted, in order that the proposals may be improved if resubmitted at a later date.
 - For the major projects of Article 39 of the Regulation, the inclusion decision is only issued with the consent of the Minister of Development, Competitiveness, Infrastructure, Transport & Networks, which is necessary for the submission of a major project application to the Committee, in accordance with Article 40 of the Regulation.
 - Examining the procedure of invitation to tender and amendment of public contracts. For contracts that fall within the scope of Community Directives in the field of public procurement, it also carries out examinations during the contract awarding process. The intermediate management body expresses its opinion within a strict deadline of twenty (20) days from receiving the relevant data. Should this deadline expire without action, it is considered to have provided its consent, bearing the responsibility related to this consent. The consent of the IMB or its inferred consent is a condition for funding of the operation. In the case of a public contract already concluded during the inclusion of the related operation, as well as in the case of public contracts that do not fall within the scope of Community Directives in the field of public procurement, the examination of the awarding procedure is carried out before the entry of expenditures in the Management Information System.
 - Cooperating with the national coordinating authority, the competent coordinating service and the Commission – and providing them with any information they may request.

- (v) Verifying the delivery of the co-funded products and services and the expenditure declared by the beneficiaries on the various operations, as well as their compliance with community and national rules.

In this context the managing authority:

- Carries out administrative and on-site verifications, covering as appropriate the administrative, fiscal, technical and physical aspects of the operations being implemented. More specifically, it conducts:
 - (a) administrative verifications of each statement of expenditure submitted by the beneficiaries, in the course of which it confirms, from the appropriate documents, that:
 - the money declared has actually been spent,
 - the products or services have been delivered in line with the inclusion decision,
 - the statements of expenditure by the beneficiaries are accurate,
 - the operation and spending comply with national and community law
 - the appropriate procedures have been followed for avoidance of duplicate funding of spending by other community or national funding instruments or under another programme period.

Where there is a large quantity of supporting documentation, sample verifications may be conducted on the basis of a sampling method.

No later than the first expenditure statement by the beneficiary, the managing authority confirms compliance with all the terms and conditions it may have set on examination of the procedure for awarding the public contracts. The managing authority also monitors the compliance of the contract with national and community legislation throughout the whole period of implementation.

- (b) on-site verifications of individual operations, during the course of which it is confirmed that the operations are actually being implemented and the products/services delivered are in compliance with the terms of the relevant contract or aid granting decision; there is also verification of the physical progress of the operation, compliance with community rules on publicity and the accuracy of the information supplied by the beneficiary in respect of the physical and economic progress of the operation.

In the case of operations where on-site verification is conducted by means of sample, the managing authority will keep records describing and justifying the sampling method, defining the operations or transactions selected for verification. The managing authority will determine the size of the sample, in order to secure reasonable certainty in respect of the legality and regularity of the relevant operations, and the level of risk ascertained (by the managing authority) regarding the type of the relevant beneficiaries and operations. The managing authority re-examines the sampling method on an annual basis, pursuant to the rules of the management and control system.

In respect of public projects the audit carried out by the Special Quality Control Consultant (ESPEL) may replace on-site verifications by the managing authority and be taken into account in assessing the sample.

- Keeps records of the verifications conducted on the MIS, where under each verification details are entered of the work carried out as part of the verification, the date and results of the verification and the measures taken in cases where irregularities were found. The findings of the on-site verifications are entered into the MIS and communicated to the beneficiary and the agency responsible for supplying aid, in the case of state aid.
- In cases where the managing authority or intermediate body are also beneficiaries in the context of the same OP, the implementation of the operation will be conducted by a different unit from that responsible for conducting the verifications – in order to ensure the required separation of duties.

In cases of state aid operations the managing authority:

- Conducts administrative and on-site verifications which cover appropriately the administrative, fiscal, technical and physical aspects of the operations being implemented. Specifically, it will carry out administrative and on-site verifications for each statement of expenditure submitted by the beneficiaries, which will involve confirmation from the appropriate documents that:
 - the declared amounts have in fact been spent,
 - the products or services have been delivered in line with the inclusion decision,
 - the statements of expenditure by the beneficiaries are accurate,
 - the operation and spending are consistent with national and community law
 - the appropriate procedures have been followed to avoid duplicate funding of spending from other community or national funding instruments or under another programme period.

Where there is a large quantity of supporting documentation, sample verifications may be conducted on the basis of a sampling method.

In the case of operations where on-site verification is conducted by means of sample, the managing authority will keep records describing and justifying the sampling method, defining the operations or transactions selected for verification. The managing authority will determine the size of the sample, in order to secure reasonable certainty in respect of the legality and regularity of the relevant operations, and the level of risk ascertained (by the managing authority) regarding the type of the relevant beneficiaries and operations. The managing authority re-examines the sampling method on an annual basis, pursuant to the rules of the management and control system.

- Keeps records of the verifications conducted, where under each verification details are entered of the work carried out as part of the verification, the date and results of the verification and the measures taken in cases where irregularities were found. The findings of the on-site verifications are communicated to the beneficiary and the agency responsible for supplying aid.

(vi) Ensuring the collection, entering and storing on the MIS of accounting documents for each operation in the context of the OP, and collection and entering on the MIS of implementation data required for financial management, monitoring, verifications, audits and

evaluation, including the data specified in Annex III of Reg. (EC) 1828/2006. It also ensures the fullness and adequacy of the data entered on the MIS.

In this context the managing authority:

- Collects, through regular reports in the form of standard forms, and keeps on the MIS and the operation file, accounting entries for each operation, as well as the implementation data required for financial management, monitoring, verifications, audits and evaluation. In cases of state aid operations the implementation data required for monitoring and verifications are kept on file.
- Monitors compliance with beneficiaries' obligations to submit all implementation data on operations required for financial management, monitoring, verifications, audits and evaluation of actions,
- Is responsible for the quality and fullness of the data entered on the MIS.
- Ensures access for the certifying authority and audit authority to the data in question.

(vii) supplying the Commission, on written application, with the information referred to in Annex III of Reg. (EC) 1828/06 within fifteen working days from receipt of such application, or within any other agreed period, in order that documents may be inspected and on-site audits carried out.

(viii) ensuring that the beneficiaries and other agencies involved in implementing operations keep either a separate accounting system, or a sufficient accounting codification for all transactions related to the operation, subject always to national accounting rules,

In this context the managing authority takes the appropriate measures to ensure that:

- The beneficiaries obliged by Greek law to keep a unified accounting system (the General or Sectoral Accounting Plans) set up a special accounting section for the co-funded project,
- The beneficiaries not obliged by Greek law to comply with the General or Sectoral Accounting Plans use appropriate accounting codes for the co-funded project, as specified by the managing authority on commencement of the project implementation,

(ix) determining procedures, in accordance with the rules of the management and control system, for ensuring the keeping of all documents related to spending and accounting audits required to guarantee an adequate audit trail. These procedures must ensure that:

- All the necessary documents are kept (originals or certified copies) at the appropriate level (managing authority, intermediate management body, beneficiary) to guarantee an adequate audit trail as defined in article 15 of Reg. (EC) 1828/2006,
- Where documents are kept in electronic format, the electronic filing systems must comply with the accepted security standards to ensure that the files comply with national rules and are reliable,
- All documents will be kept for a period of at least three years from notification of the Commission decision on the content of the closure or partial closure statement of the OP, subject always to the rules on state aid,

- The beneficiary grants access to the documents it keeps related to the implementation of the co-funded operation, as well as copies or extracts thereof, to persons authorized for this purpose from the managing authority, the intermediate body, the certifying authority, the audit authority, the Commission and its authorized representatives,
 - The names of the agencies holding the primary documents required to ensure an adequate audit trail, and the location of the offices of these agencies, shall be known to the managing authority and the intermediate management body and shall be recorded on the MIS.
- (x) supporting the work of the monitoring committee and supplying it with the necessary documents to allow monitoring of the quality of implementation of the OP in relation to its objectives,

In this context the managing authority:

- Ensures the collection and processing of all data required for monitoring the quality and efficacy of implementation of the OP by the monitoring committee and the taking of decisions by the committee,
 - Ensures the implementation of the monitoring committee's decisions,
- (xi) compiling and submitting to the Commission, after approval by the monitoring committee, the annual and final OP implementation reports, pursuant to the provisions of article 67 of Reg. (EC) 1083/2006, based on the details in the MIS and the instructions of the national coordinating authority,
- (xii) submitting to the Commission the necessary information so that it can evaluate major projects and define the contribution of the Funds in accordance with the requirements of Reg. (EC) 1828/2006,
- (xiii) coordinating the definition of the OP and monitoring the quality and effectiveness of its implementation, including the n+3/n+2 rule,
- (xiv) compiling and submitting to the monitoring committee proposals on revision of the OP, in accordance with the provisions of article 33 of Reg. (EC) 1083/2006 and the directions of the national coordinating authority,
- (xv) monitoring income from projects which generate revenue and informing the certifying authority accordingly, especially in the case of projects where revenue cannot be estimated in advance,
- (xvi) participating, along with the Commission, in the annual review of implementation of the OP, informing the monitoring committee of its results and monitoring the action taken as a result of its comments,
- (xvii) cancelling all or part of the community contribution to an operation when so required as a result of the finding of a verification or audit by the audit authority,
- (xviii) transmitting the decision for financial correction to the authorising officer for issuing a relevant decision in cases where it is necessary to recover sums unduly or unlawfully paid, as ascertained on the basis of verifications it has conducted,

- (xix) ensuring implementation and specific definition of the provisions of the joint ministerial decision of the Strategic Environmental Impact Study of the OP, in the context of the OP implementation.

In addition to the above the OP managing authority also coordinates and oversees the exercise of their duties by the intermediate management bodies of section 1.4 and has final responsibility towards the Commission. Specifically:

- (xx) coordinating and overseeing exercise of their duties by the intermediate management bodies of section 1.4 of this chapter in accordance with the requirements of the management and control system, and bearing final responsibility towards the Commission for the OP. In this context it:
 - ensures the existence and full implementation of a system of reporting and monitoring of actions whose management has been assigned to intermediate management bodies,
 - monitors correct and timely updating of the MIS with the necessary data and documents by the intermediate management bodies,
- (xxi) ensuring that the certifying authority receives the necessary information relating to the procedures and verifications for purposes of certification. In this context it oversees and coordinates, before any application for payment, the fullness of the information provided to the certifying authority,
- (xxii) making a synthesis and processing the reports of the intermediate management bodies under chapter 1.4 regarding the annual and final reports of the programmes and following the approval of the relevant monitoring committee, it submits the reports to the Commission.
- (xxiii) setting directions for proposals to revise the OP, which it composes, processes and submits to the relevant monitoring committee.

1.4 Intermediate Management Bodies

In the context of the operational programme Competitiveness and Entrepreneurship, the following may be appointed as intermediate management bodies pursuant to article 2 paragraph 6 and article 59 paragraph 2 of Reg. (EC) 1083/2006:

1.4.1 Ministries Services / Legal Entities under Public Law

The General Secretariats of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, other agencies reporting to the Ministry or other ministries, etc. (public services or other legal entities in the public sector), which exercise their management responsibilities on the basis of an exclusive right granted them by virtue of legislation or regulatory order, may be appointed as intermediate management bodies.

Specifically:

Intermediate management bodies may also be appointed after selection by competitive procedure, open to agencies originating from joint ventures of local authorities, regional development agencies, collective agencies, not-for-profit companies, etc.

(a) The General Directorate for Private Investments (Directorate for Approval and Control of Private Investments) of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, is appointed as the intermediate management body for state aid actions under the Development Act in its areas of competence.

(b) The Planning and Development Directorates of the Regions (Crete, Eastern Macedonia-Thrace, Peloponnese, Northern Aegean, Ionian Islands) are appointed as intermediate management bodies of State Aid actions which are granted by means of the development law in the corresponding regions.

(c) The General Secretariat of Industry of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks is appointed as intermediate management body for State Aid actions under its responsibility.

(d) The General Secretariat for Research and Technology, the Research Centre 'Athena' and the EYDE ETAK (Special Coordination and Implementation Service for Actions of the Ministry for Education, Lifelong Learning and Religious Affairs in the Fields of Research, Technological Development and Innovation) are appointed as intermediate management bodies of operations in the fields of Research, Technological Development and Innovation.

(e) The Special Service of Culture and Tourism under the Ministry for Education, Religious Affairs, Culture and Sports is appointed as Intermediate Management Body for actions of Culture and Tourism.

(f) The Special Coordination and Implementation Service for actions in the fields of Energy, Natural Wealth and Climate Change (EYSED EN/KA), the CRES and the Directorate of Renewable Resources and Energy Saving of the Ministry for Energy and Climate Change are appointed as Intermediate Management Bodies for operations in the Field of Energy.

A decision of the Minister for Development, Competitiveness, Infrastructure, Transport and Networks and where necessary a joint decision with the relevant competent Minister, shall appoint:

- the operations or categories of operation whose management is undertaken, and their total budget
- the obligations of the intermediate management body and the managing authority.

Each one of the above intermediate management bodies may undertake, on the basis of the aforementioned decision and in accordance with the existing regulatory framework, part of the management responsibilities as set out in section 1.3 of this chapter.

The intermediate management body cooperates with the managing authority and provides it with all the necessary data for performing its duties, including data for compilation of the annual and final OP implementation reports, the conducting of the evaluations required, the data sought by the Commission, etc.

1.4.2 Other Intermediate Management Bodies

By joint decision of the Minister of Development, Competitiveness, Infrastructure, Transport and Networks and the relevant competent Minister, on the recommendation of the managing authority, other intermediate management bodies may be appointed to perform some of the duties of the OP managing authority, acting in partnership with beneficiaries executing operations on account of and at the responsibility of the managing authority. Such a decision will determine:

- (a) the agency undertaking the management of operations in the relevant OP
- (b) the operations undertaken, their implementation timetable and budgets
- (c) the management duties assigned with the necessary specialized definition, depending on the type of actions involved
- (d) the obligations of the intermediate body and managing authority
- (e) the body responsible for inclusion of the operations.

The same decision will settle all necessary details relating to the performance of the duties undertaken by the body, depending on the type and kind of actions involved.

The intermediate management body appointed may be: a special service set up by virtue of L 2860/2000 or a public service or a legal entity under public law or other state legal entity, which carries out its management duties on the basis of rights granted by virtue of legislation or regulatory order, financial institutions or other legal entities under private law, respecting the conditions, prerequisites and procedures provided for in P.D. 60/2007 (GG 64 A').

In all other cases a non-profit making legal entity under private law or a municipal enterprise may be selected as an intermediate body following a competition. When the agency is selected by competitive procedure a contract awarding the relevant project must be signed between the relevant managing authority and the intermediate management body.

The Intermediate Body of OP Competitiveness and Entrepreneurship (EFEPAE) falls within this category; EFEPAE includes Chambers, Development enterprises, Associations of Industries and Hotel Owners, as well as cooperative banks. It has been appointed Intermediate Body for managing operations of State Aid through an open competition and by virtue of the decision of the Special Secretary for Competitiveness for the award of the project "Selection of Intermediate Bodies for Managing State Aid of OP Competitiveness and Entrepreneurship, in accordance with Art. 4 of L.3614/2007 and P.D. 98/96" (Protocol No 4226/1019D/14.1.2009)

Possible changes in the published Management and Control System, including the appointment of new intermediate management bodies, are set out in the annual control report of the OP, pursuant to article 18, par. 2 of Reg. (EC) 1828/2006.

1.4.3 Intermediate bodies for management and implementation of global grants

By joint decision of the Minister of Development, Competitiveness, Infrastructure, Transport and Networks and the relevant competent Minister, the managing authority may delegate to intermediate bodies responsibilities for management and implementation of global grants, pursuant to the provisions of articles 42 and 43 of Reg. (EC) 1083/2006. This decision will determine:

- (a) the types of operations to be covered by the global grant
- (b) the selection criteria for beneficiaries
- (c) the percentages to be contributed by the Funds and the rules governing this contribution
- (d) arrangements for monitoring, evaluation and ensuring fiscal control of the global grant towards the managing authority, including details concerning procedure for recovery of unduly paid amounts and presentation of accounts
- (e) any use of financial guarantee or equivalent measure.

The intermediate body must supply guarantees of its creditworthiness, its managerial competence in the area in question, and its competence in respect of administrative and financial management. This body is generally based or represented in the region(s) covered by the OP.

The appointment of intermediate bodies to manage and/or manage and implement global grants in an OP entails provision to the Commission of the information required under article 71 of Reg. (EC) 1083/06 and articles 21 and 22 of Reg. (EC) 1828/2006.

1.5 Certifying authority

The certifying authority is responsible for certifying the statements of expenditure and applications for payment before they are forwarded to the Commission. In this context the certifying authority performs the duties envisaged in article 61 of Reg. (EC) 1083/2006. Specifically:

- (i) drafts and submits electronically certified statements of expenditure and payment applications to the Commission, in accordance with the sample given in Annex X of Reg. (EC) 1828/06 and the provisions of article 78 of Reg. (EC) 1083/2006.
- (ii) certifies that:
 - the statement of expenditure is accurate, generated by reliable accounting systems and supported by verifiable documentation,
 - the expenditure declared complies with current national and community rules and that the amounts were spent on operations selected for funding in accordance with the criteria used in the programme and complying with current community and national rules,

in this context it may:

- exclude, provisionally, from the statements of expenditure any spending presenting a problem in relation to the current rules, and inform the managing authority of these

amounts, in writing. In provisionally excluding payments from the certification, the certifying authority takes into account and evaluates the possible fiscal impact or scale of risk for community funding, involving the following:

- i. the findings of the inspections concerning the level of operation of the managing authority and/or the intermediate bodies operating in its name or on its behalf,
 - ii. the results of the administrative controls of the certifying authority,
 - iii. the findings of the audits by the audit authority,
 - iv. the findings of the on-site verifications by the managing authority,
 - v. the findings of the quality controls by ESPEL,
 - vi. the findings of audits by the auditing bodies of the European Union,
 - vii. the findings of other auditing bodies (Special Audit Service, Public Administration Inspector, Court of Auditors),
 - viii. any other documented information coming to the knowledge of the certifying authority. (complaints, published articles, etc.),
 - carry out on-site inspections of the managing authorities, intermediate bodies and beneficiaries,
- (iii) ensures that – for purposes of certification – it has received sufficient information from the managing authority in respect of the procedures used, the data and accounting entries available on the MIS and operation file, and the verifications carried out in respect of spending included in the statements of expenditure,
- (iv) takes into account – for purposes of certification – the results of all audits conducted at the responsibility of the audit authority,
- (v) keeps electronic accounting records of the spending submitted to the Commission,
- (vi) keeps a record of the amounts which can be recovered and the amounts withdrawn after cancellation of all or part of the contribution for an operation. The amounts recovered are returned to the general budget of the European Union before closure of the OP, and deducted from the next statement of expenditure.
- (vii) submits to the Commission provisional forecasts for future payment applications, in accordance with article 76, para.3 of Reg. (EC) 1083/2006.
- (viii) sends to the Commission, by the 31st of March of each year beginning from 2008, a statement, in line with the sample given in Annex XI of Reg. (EC) 1828/06, specifying, for each priority axis of the OPs, the following:
- The amounts withdrawn from statements of expenditure submitted in the previous year, following cancellation of all or part of the public contribution to an operation,
 - The recovered amounts removed from the statements of expenditure,

- A statement of the amounts which must be recovered on 31 December of the previous year, classified by year of issue of the collection instructions,
- (ix) sends to the Commission the statement of expenditure cited in article 88 of Reg. (EC) 1083/06, in line with the sample given in Annex XIV of Reg. (EC) 1828/06, in order to proceed to partial closure of an OP,
- (x) cooperates with the competent agencies and services in defining the operating rules for the MIS in respect of processing data to be used in performing its duties.

The Special Payment Authority, which reports to the General Secretary for Investment and Development of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks is appointed as certifying authority of the OPs in the NSRF, in accordance with article 61 of Reg. 1083/2006,...

1.6 Audit authority

The audit authority is responsible for verifying the effective operation of the management and control system of the OP. In this context the audit authority undertakes the duties set out in article 62 of Reg. (EC) 1083/2006. Specifically:

- (i) ensuring that audits are carried out to verify the effective functioning of the management and control system of the OP,
- (ii) ensuring that audits are conducted on operations using a suitable sample in order to verify the expenditure declared to the Commission; to this end it will develop a sampling methodology for operations in accordance with the requirements of Reg. (EC) 1828/2006,
- (iii) presenting to the Commission within nine months of the approval of the OP an audit strategy covering the bodies which will perform the audits, the auditing method to be used in accordance with internationally accepted auditing standards, the method of sampling for operation audits, and the indicative planning of audits to ensure that the main bodies are audited and that audits are spread evenly throughout the programming period.

Where a common system applies to several operational programmes, a single audit strategy may be submitted.

(iv) By 31 December each year from 2008 to 2015 submitting to the Commission:

- an annual control report setting out the findings of the audits (of systems and operations) carried out during the previous 12-month period ending on the 30 June of the year concerned in accordance with the audit strategy of the operational programme, and reporting any shortcomings found in the system of management and control of the programme. The first report, to be submitted by no later than 31 December 2008, shall cover the period from 1 January 2007 to 30 June 2008. The information concerning the audits carried out after 1 July 2015 shall be included in the final control report supporting the closure declaration,
- an opinion, on the basis of the controls and audits that have been carried out under its responsibility, as to whether the management and control system functions effectively so as to provide a reasonable assurance that the statements of expenditure presented to

the Commission are correct, and as a consequence a reasonable assurance that the relevant transactions are legal and regular,

- a declaration for partial closure, where applicable under article 88, para.2, point (b) of Reg.1083/2006, assessing the legality and regularity of the expenditure concerned.
- (v) Submitting to the Commission, no later than 31 March 2017, a closure declaration assessing the validity of the application for payment of the final balance and the legality and regularity of the underlying transactions covered by the final statement of expenditure, which shall be supported by a final control report,
- (vi) Ensuring the electronic forwarding to the Commission of irregularities which have been the subject of administrative and judicial appeals, in accordance with the provisions of articles 27 to 36 of Reg. (EC) 1828/2006.
- (vii) Cooperating with the Commission for the coordination of OPs audits and audit methods and exchanges views on the audit results of the management and control systems, as well as views on other issues, pursuant to art. 73 of Reg. (EC) 1083/2006 of the Council.

The audit authority shall ensure that the audit work takes account of internationally accepted audit standards.

In the performance of its duties the audit authority shall ensure the safekeeping of data of a personal nature and confidential information coming into its own possession and/or that of the audit bodies operating under its responsibility.

The Financial Control Committee (EDEL), set up by decision of the Minister of Finance at the Ministry of Finance, General Secretariat for Fiscal Policy (State General Accounting Office) has been appointed as the audit authority for all OPs in the NSRF. The Committee has a membership of seven and is independent of the managing authorities of the OPs, the intermediate management bodies and the certifying authority.

1.6.1 Audits under the responsibility of the audit authority

To meet the needs arising from conducting of audits and operation of the Financial Control Committee, the following Directorates have been set up at the Ministry of Finance – General Secretariat for Fiscal Policy:

- (i) Directorate of Planning and Audits for Operational Programmes and projects co-financed by the European Regional Development Fund and Cohesion Fund, responsible for planning and conducting audits on programmes and projects co-financed by these two Funds,
- (ii) Directorate of Planning and Audits for Programmes and projects co-financed by the European Social Fund and the European Fisheries Fund, and operational programmes included under the objective of European Territorial Cooperation, responsible for planning and audits of programmes and projects co-financed by the European Social Fund and the European Fisheries Fund, and operational programmes included under the objective of European Territorial Cooperation,
- (iii) Audit Planning and Evaluation Directorate, responsible for development of the methodology for sampling, the management of the audit report, the issuing of opinions,

the monitoring of proposed corrective measures, the evaluation of audits and the OP closure declaration.

The reliability of the management and control systems is assessed using criteria set by the audit authority for system audits. It also involves a quantitative evaluation of all the crucial elements of the systems and covers the main authorities and intermediate bodies participating in the management and control of the operational programme. In the audit file a record is kept of the evaluations which have been conducted.

The operation audits are carried out on-site, using documents and files kept by the beneficiary. The audits are intended to verify that the following conditions are being met:

- (a) the operation meets the selection criteria for the OP, has been implemented in accordance with the inclusion decision and satisfies any current term or condition in respect of its functionality and use or in respect of the objectives being pursued ;
- (b) the expenditure declared to the Commission corresponds to the accounting entries and supporting documentation kept by the beneficiary ;
- (c) the expenditure declared to the Commission is consistent with community and national rules;
- (d) the public contribution has been paid to the beneficiary in accordance with article 80 of the Regulation.

The audits are conducted on the basis of an annual schedule approved by the Financial Control Committee in the context of the audit strategy, at the recommendation of the appropriate Planning and Audit Directorate. Unscheduled audits will also be conducted when necessary.

When the problems found are identified in the workings of the management and control systems, and therefore harbour risks for other operations in the OP, the Financial Control Committee must ensure further examination, including additional audits when deemed necessary, to define the scale of these problems.

1.6.2 Auditing bodies

By decision of the Financial Control Committee president, the audits are conducted by audit teams made up of employees of the three Directorates cited in paragraph 1.6.1 as well as staff of the other departments of the General Secretariat for Fiscal Policy. These audit teams may be assisted in their work by specialist experts. The latter may be civil servants (grades PE or TE – university or technical education level) or private individuals – who must be entered on the appropriate register of experts.

The register of experts, compiled and kept by the General Directorate for Administration and Control of programmes co-financed by the EU, is a list of names, entered by decision of the Director of the Register following public invitation and evaluation by the Financial Control Committee, of persons possessing special knowledge or experience in respect of the audits being conducted under the responsibility of the Committee. A decision of the Minister for Economy and Finance will regulate specific details concerning the compilation of the register of experts.

By decision of the Financial Control Committee, on recommendation of the competent Head of Directorate of Planning and Audits audits may be delegated to legal entities under private law, which by virtue of their statutes are entitled to carry out audits.

In cases where audits are conducted by bodies other than the audit authority, the latter must ensure that these bodies have the necessary operational independence from the managing authorities of the OPs, the intermediate management bodies and the certifying authority.

1.7 Agency responsible for report and opinion referred to in article 71(2)

Under article 71(2) of Reg. (EC) 1083/06 the communication of the OP Management and Control System to the Commission must be accompanied by a report setting out the results of the evaluation of the system and an opinion on the compliance of the system pursuant to articles 58-62 of the same Regulation.

The report and opinion are drawn up by the audit authority, following evaluation of the programme management and control system, which shall carry out its work taking account of internationally accepted audit standards.

1.8 Agency responsible for collecting payments from the Commission

The agency responsible for collecting payments from the Commission is the certifying authority for OPs in the NSRF, as described in sub-chapter 1.5 of this document. The Commission shall take receipt of the applications, confirmations and certifications from the certifying authority and respond on the basis of its own internal procedures, depositing the contribution requested in the Bank of Greece in the special accounts opened for this purpose by the certifying authority. The certifying authority:

- (i) is the recipient of the payment approvals from the Funds made by the Commission
- (ii) updates the General State Accounting Office on availability of credits collected for each OP and Fund,
- (iii) monitors the process of transfer of the relevant credits to the beneficiaries and ensures that these transfers are made as rapidly as possible and with no withholdings

1.9 Agency(ies) responsible for making payments to beneficiaries

National and community contributions to all operations in the OP are public investments and are financed from the State Budget through the Public Investment Programme. The agencies responsible for making payments to the beneficiaries (funding agencies) may be, as appropriate, the ministries, the Parliament and the regional authorities, which are also responsible for submission of the proposal for the compiling of the Public Investment Programme.

Funding is provided to beneficiaries in accordance with the provisions of joint decision No. 2/51571/0020/30.07.2010 of the Minister of Finance and the Minister of Development, Competitiveness, Infrastructure, Transport and Networks for the creation of an account for the national co-financing of the Structural Funds and the Cohesion Fund (NSRF Central Account) and its specialization circulars and is provided by instalment through funding decisions issued by the Public Investment Directorate at the Ministry of Development,

Competitiveness, Infrastructure, Transport & Networks, and approved by the General State Accounting Office on application from the funding agencies.

The amounts are to be paid to the beneficiaries in full, with no reduction or withholding or subsequent special charge which would result in reduction of the amount due.

2. MONITORING

2.1 Joint Ministerial Committee for community programmes (DEP)

To implement the policy on cohesion and the strategic objectives set out in the NSRF, a joint ministerial committee for community programmes was set up under Law 3483/2006, article 20. The committee is responsible for coordination and monitoring of implementation of the co-financed programmes, in order to ensure the effectiveness of the interventions and the maximum level of take-up of community resources.

In the programme period 2007-2013 the committee will function with a limited number of members as a body administering the NSRF and the programmes, ensuring the necessary flexibility and acceleration of the procedure for taking policy decisions on the strategic, managerial and operational level, in synergy with the policies of the National Reform Programme (NRP) and the Medium-Term Fiscal Strategy Framework (MFSF). It will issue opinions on the strategic monitoring reports of the NSRF submitted to the Commission under Reg. (EC) 1083/2006 and set directions for the annual meeting of chairmen of the OP monitoring committees.

The members of the Committee are as follows: Minister of Development, Competitiveness, Infrastructure, Transport & Networks, as chairman, and the Ministers of Interior, Public Reform and e-Government, of Environment & Climate Change, of Labour, Social Security & Welfare, as members.

Administrative support for the Committee and monitoring of implementation of its decisions is the work of the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks, through the services of the national coordinating authority.

2.2 Annual conference of chairmen of OP monitoring committees (EDIP)

Monitoring of fulfilment of the objectives of the Funds and the OPs in their entirety is conducted by the annual conference of the chairmen of the OP monitoring committees.

The conference of the chairmen of the monitoring committees is set up within three months of the establishment of the monitoring committees for all the OPs. The conference is chaired by the Minister of Development, Competitiveness, Infrastructure, Transport & Networks.

The conference establishes its own internal code of practice at the recommendation of the national coordinating authority. It meets annually at the invitation of the chairman to monitor the progress made towards implementation of the strategic objectives of the NSRF and the contribution of each individual OP to these objectives.

The following participate as members:

- the chairmen of the monitoring committees of the NSRF OPs (including all Regional Governors), of the Rural Development Programme and the OP Fisheries
- representatives of the national coordinating authority and EYSEKT
- representative of the certifying authority
- representative of the audit authority (with observer status)
- representatives of the special action coordination services (e.g. Ministry of Culture, Ministry of Health and Social Solidarity, etc.)
- representative of the Association of Regions of Greece
- representative of the Central Association of Municipalities of Greece
- representatives of the economic and social partners
- representative of the General Secretariat for Equality
- delegates from representative NGOs (representative of the National Confederation of the Disabled, etc.)
- Commission delegation (with observer status).

Non-permanent members may be invited to attend the conference, e.g. special experts or academics with knowledge of economic, technical, social, scientific or other issues, depending on the agenda of the conference.

The conference shall:

- Monitor the results of implementation of the programmes and their contribution to the strategic objectives of the NSRF, submitting a report to the Joint Ministerial Committee for Community Programmes.
- Monitor progress towards implementation of the policies involved and frame proposals for their coordination and broader implementation.
- Monitor the effectiveness of the procedures for ensuring coordination and complementarity of the actions of the Structural Funds with the EAFRD and EFF.

The annual conference does not take the place of the OP monitoring committees in performing any of their own responsibilities.

By decision of the Minister of Development, Competitiveness, Infrastructure, Transport & Networks committees of an advisory nature may be set up to coordinate interventions in special areas; these committees will be chaired by members of the annual conference.

To assist the annual conference in its work, monitoring of the fulfilment of the objectives of the ESF may be conducted by the annual conference of chairmen of monitoring committees of OPs within the area of competence of the ESF and OPs which are implementing ESF type actions using the 10% (or 15%) flexibility clause (EDIP-ESF). This EDIP-ESF conference will be held annually before the full annual conference and will be of an advisory nature.

To assist the annual conference of chairmen in its work, an advisory technical committee will be set up with representatives of the ministries involved in the planning and implementation of the NSRF OPs and representatives of the National Confederation of the Disabled. The committee will make recommendations to the annual conference on issues related to horizontal inclusion and implementation of the principles of accessibility for the disabled and non-discrimination in the NSRF OPs.

Secretarial support for the annual conference is provided by the national coordinating authority, which also shoulders responsibility for preparation of the relevant documentation and organization of sessions, as well as the agenda and minutes.

2.3 Operational programme monitoring committee

Under article 63 of Reg. (EC) 1083/06 a monitoring committee is set up for each OP, responsible for monitoring the effectiveness and quality of the programme's implementation.

The OP monitoring committee shall be set up within three months from the date of notification by the Commission of the decision approving the operational programme. The composition of the OP monitoring committee shall be decided in agreement with the managing authority, taking into account the principle of partnership in the monitoring, management and evaluation of all stages of implementation of the programme.

The Chairman of the OP 'Competitiveness & Entrepreneurship' monitoring committee is the Secretary General for Investments and Development of the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks. The members of the Monitoring Committee are as follows:

- The head of the OP managing authority
- The General Secretaries that head the OP intervention sectors (Industry, Commerce, Consumers, Research & Technology, Energy & Climate Change, Tourism & Culture), as well as a representative of the General Secretariat for Gender Equality
- Representatives of the national coordinating authority, EYSEKT and the Special Service for the Coordination of environmental actions
- A representative of the Paying Authority Special Service, as well as a representative of the audit authority (with observer status)
- Representatives of the intermediate management bodies that manage sections of the OP following concession (Directorate General of Private Investments of the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks, CRES, directorates for Planning and Development of the Regions of Eastern Macedonia – Thrace, Ionian Islands, Northern Aegean, Peloponnesus and Crete, the intermediate body of the OP 'Competitiveness & Entrepreneurship' (EFEPAE), the Special Service for the Coordination and Implementation of Actions in the sectors of Energy and Climate Change (EYSED ENKA), the Special Service for the Management and Implementation of Actions in the sectors of Research, Technological Development and Innovation (EYDE ETAK), the Special Service for Culture & Tourism (EYPOT), etc.)

- Representatives of special services responsible for issues of Strategy, Planning and Assessment of Developmental Programmes, Institutional Support and MIS (in an advisory role)
- Representatives of the Association of Regions and the Central Association of Municipalities of Greece
- Representatives of the Economic and Social Partners. Indicatively: Federation of Greek Industries (SEV), Federation of Industries of Northern Greece (SVVE), Union of Hellenic Chambers (KEE), and Hotel, Technical and Economic Chambers (XEE, TEE, OEE), Greek International Business Association (SEVE), Hellenic Confederation of Professionals, Craftsmen & Merchants (GSEVEE), National Confederation of Hellenic Commerce (ESEE), General Confederation of Greek Workers (GSEE)
- Representatives of the European Commission (DG for Regional Policy, Employment, Social Affairs and Equal Opportunities) (with observer status)
- A representative of ETEAN SA, as a member, and representatives of the Hellenic Bank Association and the EIB, in an advisory role
- Delegates from representative NGOs (National Confederation of the Disabled, GREENPEACE).

In the composition of the monitoring committee every effort must be made to ensure balanced representation of men and women.

Non-permanent members may be invited to attend meetings of the monitoring committee, e.g. scientific or other experts in economic, technical, social, scientific and other areas, depending on the agenda of the meeting.

Other representatives of Ministries, organisations, agencies and regions, the National Councils on Competitiveness and Development, Research and Technology, SMEs and Tourism may also be invited by the Chairperson to attend meetings of the monitoring committee, but without the right to vote.

The monitoring committee is supported in its work by the OP managing authority, which is headed by the Secretary General for Investments and Development of the Ministry of Development, Competitiveness, Infrastructure, Transport & Networks and takes responsibility for preparation of relevant documentation for organization of the meetings, and for the agenda and minutes.

The OP monitoring committee will operate on the basis of rules of procedure within the legal framework of the member state. The rules of procedure shall be drawn up in association with the managing authority of the OP, to ensure that the duties of the committee are performed in accordance with the requirements of Reg. (EC) 1083/2006. The committee will approve its rules of procedure at its first meeting.

The OP monitoring committee will have the powers and responsibilities set out in article 65 of Reg. (EC) 1083/2006. Specifically:

- It shall consider and approve the criteria for selecting the operations financed within six months of the approval of the OP, and shall approve any revision of these criteria in accordance with programming needs,

- It shall periodically review progress made towards achieving the specific targets of the operational programme on the basis of documents submitted by the managing authority,
- It shall examine the results of implementation, particularly the achievement of targets set for each priority axis and the contribution to the objectives of the Lisbon strategy, and shall set directions for the relevant managing authority for their attainment, as well as the evaluations referred to in article 48, paragraph 3, of Regulation (EC) 1083/2006 and in sub-chapter 3,
- It shall consider and approve the annual and final reports on implementation referred to in article 67 of Reg. (EC) 1083/2006,
- It shall be informed of the annual control report, or of the part of the report referring to the operational programme concerned, and of any relevant comments the Commission may make after examining that report or relating to that part of the report,
- It may propose to the managing authority any revision or examination of the operational programme likely to make possible the attainment of its objectives or improve its management, including its financial management,
- It shall consider and approve any proposal to amend the content of the Commission decision on the contribution from the Funds,
- It shall recommend to the annual conference of monitoring committee chairmen any amendments involving a change to the overall and annual contributions of the Funds.
- It shall be informed by the Special Managing Service of the OP in regard to the following OP data:
 - (a) the communication plan and the progress of its implementation,
 - (b) the information and publicity measures being implemented, and
 - (c) the means of communication used.

2.4 Monitoring indicators

In accordance with article 66 para. 2 of Reg. (EC) 1083/2006, the OP shall be monitored by the OP managing authority and the monitoring committee using indicators (financial indicators and indicators of output and result) set for each priority axis of the OP in line with the provisions of article 37 para. 1 point (c) of the same Regulation.

The OP indicators have been developed also on the basis of the methodology proposed by the Commission and set out in the relevant working paper for the programme period 2007-2013, «Indicators for monitoring and evaluation: Implementation Guide »

The indicators selected for monitoring of attainment of the OP objectives respond to the special character of the OP, its objectives and the socio-economic and environmental conditions prevailing in the geographical area of implementation. Monitoring of indicators of output and result for digital convergence operations will be conducted with the support of the Information Society Observatory.

The data required for calculation of values of indicators during implementation of the programme are collected at the operation level and then assembled on the priority axis level and, finally, on the programme level.

In the context of regular evaluation of the quality and effectiveness of OP implementation the managing authority will send the monitoring committee the data generated by the monitoring system and mainly concerning the summary financial data and information on the indicators, mainly those of output and result.

In collecting reliable financial and statistical data related to the implementation of the programme, use will be made of the Management Information System, where information will be stored on all operations funded under the programme.

2.5 Annual report

In the context of monitoring the OP the managing authority shall compile an annual implementation report which it will send to the Commission once it has been approved by the monitoring committee (article 67 para. 1 of Reg. (EC) 1083/2006 as in force). The report will contain all the information referred to in para. 2 of the same article and will be compiled in line with the requirements of Reg. (EC) 1828/2006 as in force and the instructions of the national coordinating authority.

In the above context the managing authority shall ensure - in cooperation with the national coordinating authority and EYSEKT, if the OP is co-financed by the ESF or is implementing ESF type actions using the 10% (or 15%) flexibility clause - the ongoing monitoring and improvement of the indicators to be used in monitoring and evaluation of the OP.

2.6 Annual OP examination

Article 68 of Reg. (EC) 1083/2006 requires that each year, after submission of the annual report, the OP managing authority and the Commission shall together examine the progress on implementation of the OP, the main results achieved in the preceding year, the financial implementation and any factor which might lead to improved implementation so that the desired results can be attained. They may also examine operational issues of the management and control system identified in the last annual control report envisaged in article 62 par.1 indent d-i of Reg. (EK) 1083/2006.

In respect of any comment made by the Commission after the annual examination of the programme, the managing authority, in collaboration with the national coordinating authority, briefs the monitoring committee and the Commission on the measures taken in response to these comments.

2.7 Monitoring the credits of the transitional support regions

In the case of the five regions falling under article 8 of Reg. 1083/06 mandatory credits and individual monitoring of these credits are required (finance originating from the ERDF and ESF). These regions are divided into two categories: Phasing Out (C. Macedonia, W. Macedonia, Attica) and Phasing In (Central Greece, S. Aegean).

The co-financed development interventions in these regions (apart from those financed by the Cohesion Fund) will be implemented through:

- The corresponding regional OPs (exclusively co-financed by the ERDF) and

- the three sectoral OPs, co-financed by the ESF.

It should be pointed out that the needs of the eight Exclusively Objective 1 regions will be covered by all the sectoral OPs as well as the regional OPs, with absolutely separate credits.

Maintenance of credits for the transitional support regions is fully ensured on the programme level by the existence of discrete priority axes for each type of region, as follows:

- The regional OPs have discrete Priority Axes for each region they cover.
- The three sectoral OPs which are co-financed by the ESF and cover the three types of region (Convergence Objective , phasing-out, phasing-in) have discrete thematic Priority Axes which are repeated for each of the three types of region.

All the above are confirmed during implementation, with the collation and monitoring of the relevant information on the MIS.

3. EVALUATION

3.1 General

In order to ensure the effectiveness of the community and national resources contributing to the policy on cohesion, evaluations will be conducted before, during and after implementation of the OP (articles 47-49 of Reg. (EC) 1083/2006) and Reg. (EC) 539/2010). These evaluations, strategic or operational in nature, will take into account the objective of sustainable development and the relevant community legislation on environmental impact and the strategic environmental assessment. They are to be conducted at the responsibility of the member state or the Commission and carried out by experts or agencies operationally independent of the certifying authority and audit authority appointed as part of the programme management and control system. The results of the evaluations will be published on the basis of the relevant rules on access to documents.

3.2 Operational evaluations

Article 48 para. 3 of Reg. (EC) 1083/2006 requires that member states shall carry out evaluations linked to the monitoring of operational programmes in particular where that monitoring reveals a significant departure from the goals initially set or where proposals are made for the revision of programmes (evaluations of an operational nature). When proposals for OP revision are submitted, an Analysis (Reg. (EC) 539/2010) is also submitted, presenting the reasons of the evaluation, including any implementation difficulties, as well as the expected impact of the revision, including the impact on the OP strategy.

Again in accordance with the Regulation cited above, member states may, for OPs under the Convergence objective, in accordance with the principle of proportionality, draw up an evaluation plan presenting the indicative evaluation activities which the member state intends to carry out in the different phases of the implementation.

In this context Greece, using the instructions of the Commission on evaluation of OPs and the NSRF during the programme period has drawn up an indicative evaluation plan for the period 2007-2013, setting out the programming of the evaluations on an operational level in the context of the Convergence objectives and the Regional Competitiveness and Employment objectives.

Evaluations linked with monitoring of the OP are conducted at the responsibility of the managing authority and in agreement with the general principles laid down by the national coordinating authority for evaluation of all OPs in the context of the NSRF, and in collaboration with EYSEKT where the OP is co-financed by the ESF or is implementing ESF type actions using the 10% (or 15%) flexibility clause.

Apart from those scheduled in the evaluation plan, other evaluations may also be conducted during the programme period in cases where this is deemed necessary owing to modifications of the operational programmes or the NSRF. Such evaluations cannot be timetabled during the current planning phase.

The results of these evaluations or analyses are submitted to the OP monitoring committee and to the European Commission. Moreover, the managing authority informs the national coordinating authority and EYSEKT, where the OP is co-financed by the ESF or is implementing ESF-type actions using the 10% (or 15%) flexibility clause.

The indicative evaluation plan with the programming for the period 2007-2013 is presented in the table below.

3.3 Ex post evaluation

Article 49 para. 3 of Reg. (EC) 1083/06 states that the *ex post* evaluation is the responsibility of the Commission. This evaluation covers such issues as the extent to which resources were used, the effectiveness and efficiency of Fund programming and the socio-economic impact, in order to draw conclusions on policy in the areas of social and economic cohesion. Finally those factors are identified which contributed to the success or failure of the implementation of the OPs, and good practices are highlighted.

The *ex post* evaluation is of a strategic nature, shall be conducted by independent evaluators and be completed no later than 31 December 2015. The managing authority and national coordinating authority cooperate with the European Commission in conducting the evaluation, providing the necessary data.

INDICATIVE PROGRAMMING OF EVALUATIONS FOR THE PERIOD 2007 – 2013

TYPE OF EVALUATION	PURPOSE OF EVALUATION	DOCUMENTATION OF NEED FOR EVALUATION	MAIN ISSUES COVERED	UTILIZATION OF EVALUATION	TIMETABLE	EXTERNAL OR INTERNAL EVALUATION	FUNDING	COORDINATION OF EVALUATION
OPERATIONAL PROGRAMMES:								
1. OP ENVIRONMENT – SUSTAINABLE DEVELOPMENT	Evaluation of progress of implementation of OP at mid-point of programme period	Confirmation of timeliness of strategy and achievability of objectives of the OP	What are the results of the implementation of the OP to date? Where are the main deviations from the programme objectives and what are the main causes thereof? For what objectives is a low level of attainment expected for the end of the programme period and what are the necessary corrective interventions to reverse the trend? How is the quality of the target-setting of the OP assessed? In what way can planning and target-setting be improved?	Taking of decision on possible revision of OP	2012	EXTERNAL EVALUATION	Technical Assistance	Coordinating authority, EC, each OP's managing authority
2. OP STRENGTHENING OF ACCESSIBILITY								
3. OP COMPETITIVENESS AND ENTREPRENEURSHIP								
4. OP DIGITAL CONVERGENCE								
5. OP DEVELOPMENT OF HUMAN RESOURCES								
6. OP EDUCATION AND LIFELONG LEARNING								
7. OP ADMINISTRATIVE REFORM								
8. OP MACEDONIA-THRACE	Evaluation of progress of implementation of OP before end of programme period	Confirmation of timeliness of strategy and achievability of objectives of the OP	What are the results of the implementation of the OP to date? Where are the main deviations from the programme objectives and what are the main causes thereof? For what objectives is a low level of attainment expected for the end of the programme period and what are the necessary corrective interventions to reverse the trend? How is the quality of the target-setting of the OP assessed? Can planning and target-setting be improved in view of the new programme period, and if so how?	Taking of decision on possible revision of OP	2013	EXTERNAL EVALUATION	Technical Assistance	Coordinating authority, EC, each OP's managing authority
9. OP W. GREECE – PELOPONNESE – IONIAN ISLANDS								
10. OP CRETE & AEGEAN ISLANDS								
11. OP THESSALY- C. GREECE – EPIRUS								
12. OP ATTICA								

Note : In the event of important changes in the socio-economic condition of the country and/or if deviation is identified from the initial objectives, evaluations of the NSRF and OPs may be conducted in addition to those specified in the timetable

4. INFORMATION AND PUBLICITY

In accordance with article 69 of Reg. (EC) 1083/2006 «the Member State and the managing authority for the operational programme shall provide information on and publicise operations and co-financed programmes. The information shall be addressed to European citizens and beneficiaries with the aim of highlighting the role of the Community and ensuring that assistance from the Funds is transparent». The particular definition of the publicity and information requirements is set out in the provisions (articles 2 to 10) of Reg. (EC) 1828/2006.

In order to provide this information, throughout the implementation of the programme information and publicity measures are taken, which are set out in a structured way in the OP communication plan. This plan contains the objectives and target audience, the strategy and content of the information and publicity measures to be taken for each target group (potential beneficiaries, beneficiaries, the public), the indicative budget for implementation of the communication plan, the administrative departments or agencies to be responsible for implementing information and publicity measures, indicative methods of evaluating the measures in respect of promotion and awareness raising of the OP and the role of the Community. Depending on the needs of the OP for information and publicity, actions may be assigned to external specialist consultants.

On commencement of the OPs the managing authority selects to implement a publication measure appropriate to the nature and goals of each OP. This might take the form of a conference or a press article. During implementation of the OP information and publicity measures are put into effect, with one major measure each year communicating the achievements and projects of the OP. These might involve conferences, meetings, workshops, press releases, exhibitions, printed literature and digital material and promotion in the media. The OPs have their own websites and other media for issuing information, whether printed or digital.

The information and publicity measures will make reference to the added value of the community contribution on the national, regional and local levels.

At least one information multiplier may be involved in the information and publicity measures, depending on the content of the OP or the regions it covers, in accordance with the provisions of Article 5, para. 3 of Reg. (EC) 1828/06.

The communication plan, and any significant amendment thereto, are prepared by the OP managing authority on the basis of the directions set by the national coordinating authority in association with EYSEKT where the programme is co-financed by the ESF or implementing ESF type actions through use of the 10% (or 15%) flexibility clause. It is submitted for scrutiny by the Commission in line with the procedure described in article 3 of Reg. (EC) 1828/2006.

To ensure uniformity, cohesion and synergy among the information and publicity measures of the OPs co-financed by the Funds contributing in the context of cohesion policy, the national coordinating authority issues standard principles to the OP managing authorities and ensures overall monitoring, supervision and coordination of these authorities.

The amounts provided for information and publicity are included in the funding of the OP in the context of Technical Implementation Support (article 46 para. 1 of Reg. (EC) 1083/2006).

The managing authority shall appoint at least one contact person responsible for information and publicity under article 10 of Reg. (EC) 1828/06, and shall provide details of this contact person to the Commission.

5. FINANCIAL FLOWS

National and community contributions to all the operations in the NSRF OPs represent forms of public investment and can be financed from the state budget through the Public Investment Programme. Credits from the Funds are entered in the Revenue Column of the state budget (Public Investment Programme). Provisions for transfer of credits to the funding agencies of the Public Investment Programme are entered in the Programme accounts as expenditure. Credits to the beneficiaries pertain to the public spending envisaged (community and national). Any private contributions are monitored through the MIS.

The necessary data are kept by the Public Investment Programme to allow forecasts for funding applications for implementation of the NSRF OPs.

The process for issuing payments to the beneficiaries is as follows:

1. Entry of public expenditure on operation (national and community contribution) in Public Investment Programme, after its inclusion in an OP by collective decision of the funding agency
2. Submission of application for funding to be made available by the beneficiary or intermediate management body, in cases of state aid to the funding agency
3. Submission of application by the funding agency to the Ministry of Economy and Finance for funding to be made available
4. Issuing of decision that funding should be released by the Ministry of Economy and Finance, on the basis of the application and the available limit on payments, and communication of this decision to the General State Accounts Office, the Bank of Greece and the funding agency
5. Instruction for allocation of credits to operations by the funding agency to the General State Accounts Office and the Bank of Greece, also copied to the beneficiary or intermediate management body

On allocation of funding to the operation the credits become available to the beneficiary, who may proceed to draw on the operation account, issuing cheques to contractors. Payments to contractors are charged directly to the operation account.

In cases of state aid the credits are available to the intermediate management body, which may proceed to draw on the operation account, issuing cheques to the beneficiaries. Payments to beneficiaries are charged directly to the operation account.

In the event that the beneficiaries or intermediate management bodies are legal entities in public or private law, after conclusion of steps 1 to 4 an order is issued to transfer credits from the funding agency to the account of the legal entity, so that payments can be made. The transfer of the sums in question takes the form of direct grant or increase in share capital (in case of sociétés anonymes in the public sector).

After the transfer to the account of the legal entity, the beneficiary or intermediate management body proceeds to make payments to the contractors or beneficiaries respectively.

No amount shall be deducted or withheld from payments to contractors or beneficiaries, nor shall any special charge or duty be levied equivalent to a deduction or withholding, resulting in a diminution of the amount of the payments.

Expenditure incurred by the beneficiaries shall be entered on the MIS after verification by the managing authority and shall be supported by paid invoices or accounting entries of equivalent evidentiary value.

The certifying authority shall collate the items of expenditure recorded on the MIS in order to certify the expenditure and compile the statement of expenditure referred to in article 78.

Any interest generated by credits for funding of operations in the context of the OP shall be regarded as a national resource and used to cover national public spending. The agencies managing these sums are obliged to make an annual declaration of the interest generated to the managing authority of the relevant OP. The banks or other financial institutions through which the above amounts are handled must provide details of transactions and balances in the relevant accounts to the certifying authority, when so requested by the latter.

6. EXCHANGE OF ELECTRONIC DATA

For the purposes of articles 66 and 76 of Reg. (EC) 1083/2006, the managing authority of the OP will update the information system established at the European Commission (SFC 2007) for exchange of data concerning the OP, in accordance with the provisions of articles 39, 40, 41 and 42 of Reg. (EC) 1828/2006.

The OP managing authority shall also ensure the existence of a system for entering and storing in computerised form of accounting records for each operation in the OP, as well as the collection of implementation data required for financial management, monitoring, verification, audits and evaluation, in accordance with article 60 point c. of Reg. (EC) 1083/2006. To this end, the description of the Management and Control System to be submitted to the Commission will include a description of the above system, including a flow chart of the organization (central or shared network system or decentralised system with links between systems), in accordance with the provisions of article 71 para. 1 of Reg. (EC) 1083/2006 and correspondingly article 21 and Annex XII para. 6 of Reg. (EC) 1828/2006.

For the above reasons the appropriate adaptations will be made to the existing Management Information System (MIS) of the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks created for the needs of the CSF 2000-2006.

The MIS will also meet the requirements of collection and entering of data concerning the responsibilities of the audit and certifying authorities of the programme, and will support the authorities in question in their obligations to exchange electronic information with the Commission. Efforts will be made to develop a system compatible with the MIS for introduction of use of electronic media in public contract procedures.

The MIS is already in operation, serving the needs of the CSF 2000-2006. On completion of the necessary adjustments – currently under way – it will provide an economic and statistical database meeting the needs of electronic updating of the Commission.

The management and operation of the MIS, and issues of organization, operation and development, will be determined by law and special executive orders issued for implementation of the law.

A comprehensive network Helpdesk application is available to deal with technical and managerial issues related to the MIS.

7. ENSURING THE PARTNERSHIP RELATIONSHIP

Article 11 of Reg. (EC) 1083/2006 states the requirement for attainment of the Funds' objectives in the framework of close cooperation, or partnership, between the Commission and each member state, and between the member state and other stakeholders at the local, regional and national level (vertical and horizontal dimension of partnership). The need to ensure partnership at all levels of implementation of the OP is reflected in such measures as:

- (i) The use of procedures of broad consultation at all levels of planning in order to create a multi-faceted approach to development alternatives for the country's regions, by means of productive and effective dialogue with all agencies involved.
- (ii) Representation of economic and social partners, NGOs representing special groups, representatives of the first and second tier local authorities in the composition of the OP Monitoring Committee, which is the main mechanism for ensuring the quality and effectiveness of the programme, where all the agencies having a stake in the objectives and actions of the programme are represented.

Selection of the appropriate partners at each level of implementation of the OP takes into account the degree of contribution of the Funds to the region represented by the partners, the experience and competence of the partners in the areas on which the OP is focused and the need to promote gender equality and sustainable development.

Concern for the effective operation of the partnership principle, to ensure it provides the anticipated added value, is the responsibility of the member state and is realized through precise and adequate distinction of the roles and competencies of the various partners at the level appropriate in each case.

8. PROMOTION OF GENDER EQUALITY AND THE PRINCIPLE OF NON-DISCRIMINATION

Article 11 of Reg. (EC) 1083/2006 states that member states and the Commission shall ensure the promotion of gender equality and gender mainstreaming during the various stages of implementation of the Funds' actions. They shall also take the appropriate measures to prevent any discrimination on grounds of sex, race or ethnic origin, religion or belief, disability, age or sexual orientation during the various stages of implementation of the Funds' actions, and particularly in respect of the question of access thereto. Accessibility for the disabled, in particular, is one of the criteria which must be met in determining the actions to be co-financed by the Funds and which must be taken into account in the various stages of implementation.

The measures envisaged for promotion of gender equality and prevention of discrimination at the various stages of implementation of the OP include:

- (i) As balanced as possible participation of men and women in the OP monitoring committee and the representation on the committee of state authorities responsible for issues of equality, and social organizations representing particular population groups (National Confederation of the Disabled, ROM Network, etc.)
- (ii) The taking of measures to publicize the programme and its actions in order to ensure maximum possible access to community funding. These measures will include the sending of calls to all members of the OP monitoring committee and to all interested agencies, which can ensure broad dissemination of funding opportunities and the special terms and conditions for receipt of funding.
- (iii) Monitoring and updating of the OP monitoring committee and European Commission, via the annual report, in respect of the measures taken for gender equality under the OP, their effectiveness and the corrective interventions required to ensure the principle of non-discrimination.
- (iv) The use of specific accessibility criteria for the disabled during the process of selecting operations for co-financing.

9. FLEXIBILITY CLAUSE

Under article 34 of Reg. (EC) 1083/2006 OPs receive financing only from one Fund, except those OPs co-financed by the ERDF and the Cohesion Fund. However, they may, subject to the deviations envisaged in the special regulations of the Funds, finance - in a supplementary manner and within the 10% limit on community funding for each priority axis (flexibility clause) – actions which fall within the area of contribution of another Fund, provided that such actions are required for more satisfactory implementation of the operation and are directly linked with that operation.

In implementing the OPs it is anticipated that the flexibility clause will be used throughout the programme period. Supplementary financing by the ERDF and ESF may amount to up to 10% of all community funding for each priority axis (or up to 15% for the priority axis Social Inclusion of the ESF for all regions, and the priority axis Sustainable Urban Development of the ERDF, which covers phasing in regions).

The categories of intervention which the competent authorities will implement using the flexibility clause have already been described in the OPs. Mention is made specifically of:

- Actions to enhance and upgrade skills and increase mobility of the labour force falling within the strategy of the Ministry of Development and included in the OP «Entrepreneurship and Competitiveness» for the 8 Exclusively Convergence Objective regions and in the ROPs for the 5 transitional support regions, e.g. thematic networks for R&D, creation of regional poles of innovation, actions to strengthen entrepreneurship, improvement of market supervision and support for the consumer, strengthening support structures for entrepreneurship and innovation (special mention is made in section 3.1.)
- Provision of social services on the local level through ROPs (programmes of the 'Home Help' type), included in the strategy of the priority axes «Sustainable Development and Quality of Life» to improve the quality of life of residents of the regions and to strengthen social cohesion.
- Interventions included in all the priority axes of the OP «Education and lifelong learning» for provision of equipment to promote use of new technologies in the educational process (e.g. equipment for science labs, especially for the disabled, equipment for labs

in vocational senior high schools and other schools, equipment for adult education structures, equipment for tertiary education).

- Interventions included in priority axes 1 and 2 of the OP «Digital Convergence» (e.g. education in the use of IT systems such as TAXIS).
- Interventions included in priority axes 1, 2 and 3 of the OP «Administrative Reform» for provision of electronic equipment, networking, layout of interiors, procurement of special software, etc.

It should be noted that similar interventions will be implemented under one and the same statutory framework, regardless of their source of finance (operational programme or Structural Fund).

During review of the OPs the competent bodies will examine the possibility and necessity of using the flexibility clause in other categories of intervention (e.g. integrated interventions on the local or sectoral level, integrated interventions targeting special population groups, integrated urban development populations).

The use of the flexibility clause is monitored by the managing authority through the MIS on the level of the priority axis, in order to ensure that the percentage of supplementary finance from the corresponding Fund does not exceed the 10% (or 15%) ceiling.

The managing authority updates the Commission, in the annual report, on the use of the flexibility clause, providing information on the priority axis level which will allow verification of the conditions for use of the clause and of any breach of the ceiling on contributions from the relevant Fund.

10. SPECIAL ISSUES

The partnership principle has been fully implemented by the Ministry of Employment & Social Protection in the process of drafting the sectoral OP «Development of Human Resources», with mobilization of all policy sectors and social partners in the National Strategic Reference Framework, based on the principle of transparency. The involvement of the partners in the process was based on representative participation of the social groups on the national and regional levels, and full coverage of the whole range of policies and special horizontal issues developed in the OP.

The social partners are currently playing a decisive role in:

- The Executive Committee of the National System for Linking Vocational Education and Training with Employment (ESSEEKA).
- The procedures for elaboration and development of job profiles
- The National Council for Social Policy (ESYKP).

In the programme period 2007-2013 the Ministry of Employment and Social Protection intends to enter dialogue with the social partners in order to develop an integrated operational plan to strengthen their role and give their involvement a permanent and viable character.

Through a 'programme agreement' the Ministry of Employment intends to make available up to 2% of resources in the OP «Development of Human Resources» for specific measures to

support interventions and raise the awareness of beneficiaries, for the implementation of joint actions, as well as strengthening the operational opportunities of the social partners, especially in respect of the adaptability of workers and businesses.

11. FINANCIAL ENGINEERING INSTRUMENTS

In the context of the OP operations can be funded which involve the founding, organization and operation of funds or holding funds as defined in article 44 of the Regulation. These funds are to be set up by Presidential Decree, to be issued at the recommendation of the Minister for Economy and Finance and the Minister within whose competence the particular operation falls.

A joint decision of the Minister for Economy and Finance and the competent Minister for each OP will set the terms and conditions and any other necessary details concerning the contribution by OPs to the funds referred to in the preceding paragraph.

12. BRIDGE PROJECTS

Bridge projects are those projects of which part of their physical object is co-funded in an OP from the period 2000-2006 and part in an OP from the programme period 2007-2013.

These projects may be funded in an OP from the period 2007-2013 provided that they meet the following conditions:

- The competent authority allocates the operations into two separate and distinct stages or sections for each OP in the corresponding period, with a distinct economic and physical object for each period,
- The project must meet the eligibility conditions of the OP in the period 2007-2013 under which it is to be co-financed as a bridge project,
- The project must meet the eligibility conditions of the OP in the period 2000-2006, under which it was originally co-funded. If on the basis of audit reports or other factors it transpires that the expenditure of a project was not eligible for co-financing in the period 2000-2006, then this expenditure cannot be accepted for co-financing in the period 2007-2013,
- The non-completion of the project during the period 2000-2006 must be fully justified,
- For the part of the project to be included in the NSRF the co-financing percentages of the relevant OP of the NSRF 2007-2013 will remain in place, as appropriate to each case,
- In the case of major bridge projects for which the total cost of investment from both programme periods exceeds 25m Euro in the case of the environment and 50m Euro in the case of other fields, in accordance with article 39 of Reg. (EC) 1083/06, the information submitted to the Commission under article 40 of the same Regulation will include details distinguishing the difference in physical and economic object between the two programme periods.

Each OP of the NSRF will define the major bridge projects (in the sense of article 39 of Reg. (EC) 1083/2006) to be funded by that Programme.

The final implementation reports on the OPs from the period 2000-2006 will give details of the bridge projects which are not major projects in the sense of Reg. (EC) 1083/2006. Projects defined at the end of the programme period 2000-2006 as incomplete or non-operational and which, in accordance with the objectives and priorities of the OPs 2007-2013, are not eligible, must be completed and rendered operational by the member state using national resources.

Funding of the bridge projects does not render invalid the country's obligations for the period 2007-2013, in terms of compliance with regional allocations and the Lisbon objectives.

13. OTHER ISSUES

13.1 Rules on public contracts, state aid, equal opportunities and the environment

Instructions and directions related to the current rules in these areas will be defined in the description of the Management and Control System, in accordance with the requirements of article 21 of Reg. (EC)1828/2006. In this context instructions will be issued on compliance with rules on state aid, including instructions on accumulation of aid and avoidance of duplicate funding.

The managing authority must ensure compliance with the community statutory framework in respect of competition and public contracts, state aid, the environment, transport and energy, public health and welfare, equal opportunities. It will ensure that the rules on state aid in force on approval of the decision to grant aid are complied with.

To minimize the likelihood of irregularities in the procedure for awarding and implementing public contracts, the Greek authorities will proceed to codify and simplify the legal framework for public works contracts.

13.2 Managerial competence of OP beneficiaries

During the programme period 2007-2013 the administrative efficiency of the implementation agencies (beneficiaries) of co-financed projects will be improved by introduction of rules to confirm their managerial competence before they undertake responsibility for implementing projects. A special process is envisaged whereby the requirements or management model of the project will be defined, as well as the procedures and agencies responsible for confirming the managerial competence of the beneficiaries, taking into consideration the scale and special features of the projects to be co-financed by the ESF, as well as the beneficiaries which will be implementing them.

Until the above procedure is in place, scheduled for 1.1.2009, and for special categories of operation, especially the projects continuing from the CSF 2000-2006, the managerial competence of the beneficiaries will be confirmed pursuant to the instructions of the national coordinating authority and the provisions set out in the letter ref. EYSSAAP1469/04.05.2007 of the Minister for Economy and Finance.

In the case of beneficiaries whose managerial competence is not confirmed, the responsibility for implementation may be transferred by a framework agreement between the two parties to the authority to which the beneficiary is answerable, or by which it is supervised, or to a related public department or société anonyme in the broader public sector, which meets the beneficiary managerial competence criteria. If the body undertaking the implementation of the project by the process described above incurs additional expenditure from the administrative services it provides, this expenditure will be included in the project budget and covered either by the project itself or by the technical assistance budget of the OP in which it is included. On delivery for use the project is handed over to the beneficiary together with a full technical and financial documentation.

The bridge projects financed under the current OP, for their completion will comply with the closure instructions to be decided by the EU.

PRIORITY PROJECTS

All possible efforts will be made so that the priority projects are completed in the framework of the current OP.

5. FUNDING

**TABLE 37 – ANNUAL ALLOCATION OF COMMUNITY CONTRIBUTION TO OP
COMPETITIVENESS AND ENTREPRENEURSHIP 2007 - 2013**

		ERDF	Cohesion Fund	Total
		(1)	(2)	(3) = (1) + (2)
2007	Regions without transitional support	173.654.935		173.654.935
	Regions with transitional support			0
	Total	173.654.935	0	173.654.935
2008	Regions without transitional support	177.128.034		177.128.034
	Regions with transitional support			0
	Total	177.128.034	0	177.128.034
2009	Regions without transitional support	180.670.594		180.670.594
	Regions with transitional support			0
	Total	180.670.594	0	180.670.594
2010	Regions without transitional support	184.284.008		184.284.008
	Regions with transitional support			0
	Total	184.284.008	0	184.284.008
2011	Regions without transitional support	187.969.686		187.969.686
	Regions with transitional support			0
	Total	187.969.686	0	187.969.686
2012	Regions without transitional support	318.149.460		318.149.460
	Regions with transitional support			0
	Total	318.149.460	0	318.149.460
2013	Regions without transitional support	234.143.283		234.143.283
	Regions with transitional support			0
	Total	234.143.283	0	234.143.283
General Total 2007-2013	Regions without transitional support	1.456.000.000	0	1.456.000.000
	Regions with transitional support			0
	TOTAL	1.456.000.000	0	1.456.000.000

TABLE 38 – FUNDING SCHEME O.P. COMPETITIVENESS AND ENTREPRENEURSHIP 2007 – 2013 BY PRIORITY AXIS (ANNEX XVI OF IMPLEMENTATION REGULATION)

Eligible public spending (column 8) is used as the basis for calculating the community contribution

AXIS CODE	DESCRIPTION	COMMUNITY FUNDING				NATIONAL CONTRIBUTION	INDICATIVE ANALYSIS OF NATIONAL CONTRIBUTION PERCENTAGE		TOTAL FUNDING (Base of calculation of Community Contribution)	CO- FUNDI NG PERC ENTA GE	FOR INFORMATION				TOTAL PUBLIC SPENDING
		ERDF	ESF	COH ESI ON FUN D	TOTAL		NATIONAL PUBLIC FUNDING	NATIO NAL PRIVA TE FUNDI NG			CONTRIBUT ION OF EURO PEAN INVEST MEN T BANK	OTHER FUNDING			
1	2	3	4 = 1+2+3	5 = 6+7	6	7*	8 = 4+5	9 = 4/8	10	11a	11b	TOTAL 11a + 11b	13= 4+5+11a		
1	AXIS 1 : CREATION AND EXPLOITATION OF INNOVATION, SUPPORTED BY R&TD	96.432.500			96.432.500	17.017.500	17.017.500		113.450.000	85,00 %		0	25.000.000	25.000.000	113.450.000
2	AXIS 2 : STRENGTHENING OF ENTREPRENEURSHI P AND EXTROVERT ORIENTATION	656.200.000			656.200.000	115.800.000	115.800.000		772.000.000	85,00 %			932.000.000	932.000.000	772.000.000
3	AXIS 3 : IMPROVING THE BUSINESS ENVIRONMENT	355.292.500			355.292.500	62.698.677	62.698.677		417.991.177	85,00 %		0	240.000.000	240.000.000	417.991.177

OPERATIONAL PROGRAMME COMPETITIVENESS AND ENTREPRENEURSHIP 2007-2013

AXIS CODE	DESCRIPTION	COMMUNITY FUNDING				NATIONAL CONTRIBUTION	INDICATIVE ANALYSIS OF NATIONAL CONTRIBUTION PERCENTAGE		TOTAL FUNDING (Base of calculation of Community Contribution)	CO- FUNDI NG PERC ENTA GE	FOR INFORMATION			TOTAL PUBLIC SPENDING	
		ERDF	ESF	COH ESI ON FUN D	TOTAL		NATIONAL PUBLIC FUNDING	NATIO NAL PRIVA TE FUNDI NG			CON TRIBU TION OF EURO PEAN INVES TMEN T BANK	OTHER FUNDING			
1	2	3	4 = 1+2+3	5 = 6+7	6	7*	8 = 4+5	9 = 4/8	10	11a	11b	TOTAL 11a + 11b	13= 4+5+11a		
4	AXIS 4 : INTEGRATION OF COUNTRY'S ENERGY SYSTEM AND STRENGTHENING OF SUSTAINABILITY	294.525.000			294.525.000	51.975.000	51.975.000		346.500.000	85,00 %		0	325.000.000	325.000.000	346.500.000
5	AXIS 5 : TECHNICAL SUPPORT FOR IMPLEMENTATION	53.550.000			53.550.000	9.450.000	9.450.000		63.000.000	85,00 %		0	0	0	63.000.000
	TOTAL	1.456.000.000	0	0	1.456.000.000	256.941.177	256.941.177		1.712.941.177	85,00 %		0	1.522.000.000	1.522.000.000	1.712.941.177

(*) This column 7 is left empty because, for calculating the Community Contribution of the Programme, the basis is the eligible public funding

11a: Other national resources, anticipated revenue, non-eligible expenditure.

11b The amounts of private contribution are entered

TABLE 39: INDICATIVE ANALYSIS OF COMMUNITY CONTRIBUTION TO THE OPERATIONAL PROGRAMME BY PRIORITY THEME (IN EURO)

Dimension 1		
Priority Theme		
Code *	Description	Amount **
01	R&TD activities in research centres	850.000
02	R&TD infrastructure (including buildings, equipment and high-speed computer networks linking research centres) and centres of competence in a specific technology	9.732.500
03	Technology transfer and improvement of cooperation networks between small and medium-sized businesses (SMEs), between these and other businesses and universities, post-secondary education establishments of all kinds, regional authorities, research centres and scientific and technological poles (scientific and technological parks, technopoles, etc.)	11.050.000
04	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)	7.650.000
05	Advanced support services for firms and groups of firms	222.145.800
06	Assistance to SMEs for the promotion of environmentally-friendly products and production processes (introduction of effective environmental management system, adoption and use of pollution prevention technologies, integration of clean technologies into firm production)	19.084.200
07	Investment in firms linked directly to research and innovation (innovative technologies, establishment of new firms by universities, existing R&TD centres and firms, etc.)	43.350.000
08	Other investment in firms	11.789.500
09	Other measures to stimulate research and innovation and entrepreneurship in SMEs	655.501.300
33	Electricity	16.447.500
34	Electricity (TEN-E)	24.650.000
35	Natural gas	25.500.000
36	Natural gas (TEN-E)	8.986.200
39	Renewable energy: wind	42.925.000
40	Renewable energy: solar	17.680.000
41	Renewable energy: biomass	42.500
42	Renewable energy: hydroelectric, geothermal and other	1.870.000
43	Energy efficiency, co-generation, energy management	153.873.800
54	Other measures for environmental protection and risk prevention	2.125.000
55	Promotion of natural resources	42.500
57	Other assistance to improve tourist services	62.457.150
58	Protection and conservation of cultural heritage	32.397.050
59	Development of cultural infrastructure	29.750.000
60	Other assistance to improve cultural services	850.000
81	Mechanisms to improve correct practices and programme design, monitoring and evaluation on the national, regional and local levels, and creation of skills involved in implementation of policies and programmes	1.700.000
85	Preparation, implementation, monitoring, inspection	48.025.000
86	Evaluation and studies · information and communication	5.525.000
Total		1.456.000.000

TABLE 40: INDICATIVE ANALYSIS OF COMMUNITY CONTRIBUTION TO OPERATIONAL PROGRAMME BY FORM OF FUNDING (IN EUROS)

Dimension 2		
Form of funding		
Code *	Description	Amount **
01	Non-refundable assistance	1.194.000.000
02	Assistance (loan, interest subsidy, guarantees)	260.000.000
03	Business capital (stake, venture capital)	2.000.000
Total		1.456.000.000

TABLE 41: INDICATIVE ANALYSIS OF COMMUNITY CONTRIBUTION TO OPERATIONAL PROGRAMME BY TYPE OF TERRITORY (IN EURO)

Dimension 3		
Territorial type		
Code *	Description	Amount **
01	Urban region	964.770.568
03	Islands	200.724.186
05	Rural regions (except mountains, islands or sparsely and very sparsely populated areas)	290.505.246
Total		1.456.000.000

* The categories must be codified for each dimension in accordance with the standard system of classification.

** Estimated amount of Community Contribution for each category. The financial contribution of the Funds is determined in articles 52 and 53 of Reg. 1083/2006, in combination with Annex III of the same Reg. Greece is making use of the maximum eligible percentage (85%) for all the Priority Axes, given that it covers the most important criteria of article 52, i.e.

- the severity of problems, especially of an economic nature
- the importance of each Priority Axis for community priorities as set out in the community strategic guidelines for cohesion, as well as the national and regional priorities
- and the percentage of mobilization of private financing.

ANNEXES

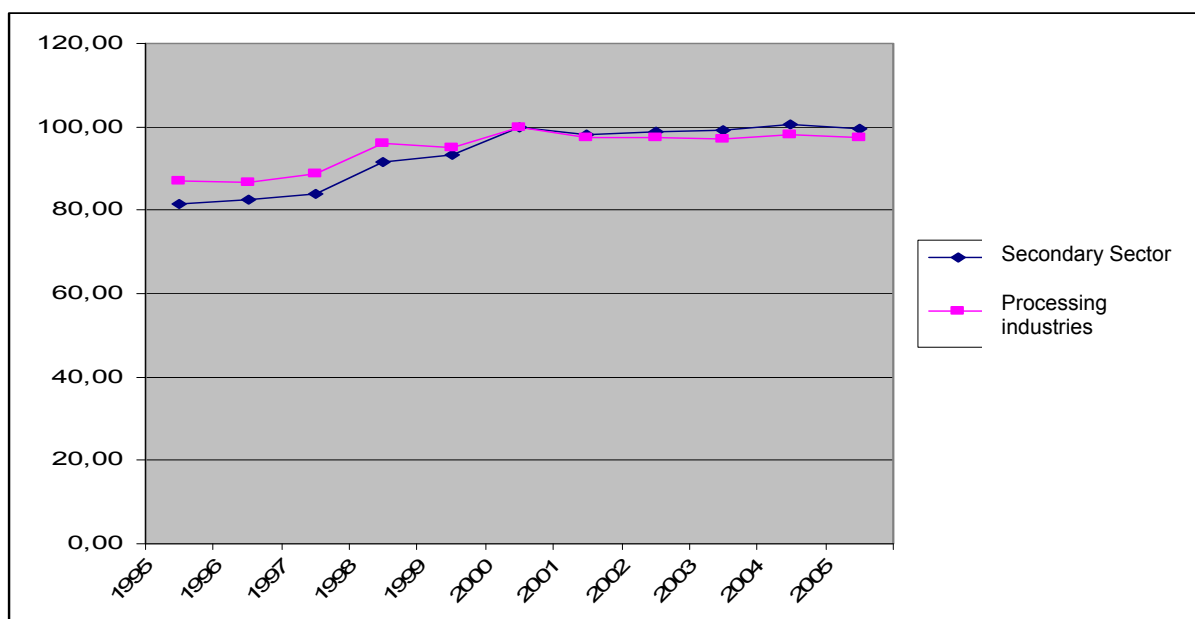
1. CURRENT SITUATION BY SECTOR
2. SPECIAL OBJECTIVES BY SECTOR
3. ALLOCATION OF SPENDING FOR PROJECTS OF A
HORIZONTAL NATURE
4. QUANTITATIVE DETAILS OF TRANSITIONAL
SUPPORT REGIONS IN THE OP COMPETITIVENESS
AND ENTREPRENEURSHIP
5. CORE INDICATORS

ANNEX 1 :
CURRENT SITUATION BY SECTOR

PROCESSING

The overall processing production indicator has been relatively static since 2000, following a period of growth over the years 1995-2000. Change in the secondary sector as a whole, however, has been more positive, probably because of good results in the construction sector.

DIAGRAM 1: REVISED PRODUCTION INDICATOR, 2000=100



Most of the sectoral indicators have shown changes over the recent period, indicating continuing stable or slightly decreasing growth. The table below shows that in essence Greek processing continues:

- to present a 'loss' in the following sectors: tobacco, textiles, clothing, leather and footwear, wood and cork, other transport equipment, paper and paper products, office equipment and computers, furniture and other industries (9 sectors)
- to retain its position (but not with particular growth in respect of the average) in the sectors: food and drinks, non-metallic minerals, machinery and equipment, electrical appliances etc., radio, TV and communications (5 sectors)
- to present a 'gain' in the sectors: printing and publishing, oil and coal derivatives, chemicals, rubber and plastic products, basic metals, manufacture of products from metal (7 sectors).

TABLE 1: REVISED INDICATOR OF INDUSTRIAL PRODUCTION

	2000=100	2001	2004	trend	exposure ¹
15	Food and drinks	102,16	105,04	↑	M
16	Tobacco	101,48	116,44	↑↑	M
17	Textiles	92,56	78,10	↓↓	H
18	Clothing	93,14	82,74	↓↓	H
19	Leather and footwear	95,08	73,60	↓↓	H
20	Timber and cork	89,34	84,07	↓	M
21	Paper and paper products	90,75	89,24	↓	M
22	Printing and publishing	98,96	107,08	↑↑	L
23	Oil and coal derivatives	98,69	98,68		L
24	Chemicals	102,40	118,21	↑↑	L
25	Rubber and plastic products	102,06	95,94	↓	H
26	Non-metallic minerals	102,21	105,95	↑	L
27	Basic metals	103,02	114,46	↑↑	M
28	Manufacture of final products from metal	91,37	107,56	↑↑	L
29	Machinery and other equipment	82,53	86,73	↓	M
30	Office equipment and computers	89,67	36,61	↓↓↓	H
31	Electrical appliances etc.	95,67	101,32	↑	M
32	TV, radio and communications equipment	74,83	50,06	↓↓	H
33	Surgical equipment and precision instruments	136,76	108,94	↓	H
34	Transport	79,35	72,91	↓	M
35	Other transport equipment	102,93	88,79	↓↓	M
36	Furniture – other industries	81,52	60,35	↓↓	L
37	Recycling	98,84	128,77	↑↑	L

NATIONAL STATISTICS OFFICE, COMMERCIAL AND INDUSTRIAL CHAMBER

At the same time Greek processing is significantly behind in terms of concentration in high added value sectors:

- ✓ it stands at 75% of the European and 60% of the American average in terms of concentration in high added value sectors
- ✓ it stands at 150% and 200% respectively in terms of concentration in low added value sectors
- ✓ it stands at 60% and 175% of the Irish levels in terms of concentration in high added value and low added value sectors respectively
- ✓ it lags behind Portuguese industry at 75% and 135% in respect of concentration in sectors of high added value and low added value respectively
- ✓ in terms of composition it is almost identical to the Spanish model, although the latter has the inherent advantage of a larger domestic market.

¹ Assessment of exposure to competition (depending on market position, nature of product, etc.): High – Medium - Low

TABLE 2: SECTORAL COMPOSITION OF INDUSTRY IN EU AND USA, 2001

In respect of added value	high	medium-high	low to medium	Low
EU-15	33,2	17,3	29,7	19,9
USA	39,9	16,7	28,1	15,3
Belgium	43,9	15,4	25,5	15,2
Denmark	29,9	20,0	32,3	17,8
Germany	33,3	17,2	30,8	18,7
Greece	24,8	14,6	29,8	30,7
Spain	25,8	14,8	31,0	28,4
France	37,4	17,2	25,7	19,8
Ireland	43,4	14,1	25,2	17,3
Italy	30,8	14,2	32,2	22,8
Luxembourg	48,7	13,2	24,1	14,0
Holland	34,8	16,4	29,7	19,1
Austria	29,9	13,8	35,2	21,1
Portugal	32,6	15,4	29,6	22,5
Finland	27,9	19,4	35,8	16,9
Sweden	30,9	21,6	30,3	17,3
UK	32,4	18,7	28,9	20,0

EC, DG Enterprise, EU Productivity and Competitiveness: an Industry Perspective, 2003

The overall result is the appearance of a profile of 'de-industrialization', with a fall in the number of industrial units and, of course, jobs:

TABLE 3: CHANGES IN NUMBER OF INDUSTRIAL UNITS AND JOBS

period	number of units	employed
1995-2000	-13,7%	-8,4%
2000-2002	-23,8%	-1,4%
1995-2002	-34,2%	-9,7%

NATIONAL STATISTICS OFFICE, COMMERCIAL AND INDUSTRIAL CHAMBER figures, own processing

The problem is reflected in (and exacerbated by) the level of productivity in Greek industry, and by the (long-term) increase in weighted hourly cost of labour: from 77% of the American level in the period 1979-81 it rose to 125% in 1994-96 only to fall back to 109% in 1999-2001:

TABLE 4: HOURLY PRODUCTIVITY IN INDUSTRY IN EU AND USA

USA = 100	1979-81	1994-1996	1999-01
EU-15	84,6	88,0	80,3
Belgium	87,2	117,9	115,7
Denmark	114,0	94,3	88,5
Germany	100,3	92,7	82,7
Greece	45,7	30,7	27,4
Spain	60,5	73,5	62,1
France	103,9	104,3	101,6
Ireland	34,3	90,6	169,8
Italy	90,8	91,1	78,9
Holland	94,2	110,2	99,4
Austria	62,4	76,9	79,0
Portugal	37,1	33,4	34,3
Finland	73,7	102,6	101,8
Sweden	93,5	99,3	86,6
UK	63,3	81,9	75,3

Processing of data from: EC, DG Enterprise, EU Productivity and Competitiveness: an Industry Perspective, 2003.

If we explore each sector (using the NACE classification) comparing Greek and German industry², it appears that the former now has a higher ratio of unit value in the sectors: food and drink, tobacco, paper and paper products, radio, TV and communications devices, surgical equipment and precision instruments. In fact, in the two first sectors performance is better than in any other country in the EU-15 and equal to that of the USA. The sectors chemicals, transport and furniture-other industries are at tolerable levels. Low levels (below 75% of German figures) are noted for the sectors: textiles, clothing, printing and publishing, rubber and plastic products, non-metallic minerals and final products from metals, i.e. sectors where Greek industry was highly specialized, which accounted in certain regions for a very large proportion of local employment and which certainly cannot present themselves as highly innovation-intensive.

This relative 'de-industrialization' reflects firstly the effect of broader international parameters. European industry as a whole finds itself in a newly emerging international pattern of labour allocation: the share of intra-European imports of industrial products in the EU-15 countries is falling steadily (from about 65-85% per country in 1967 to 55-70% in 2002); the share of global production of sectors such as textiles-clothing, metallurgy, vehicles, electrical products, all fell steeply between 1967 and 2002 and in overall terms the EU has lost 1.4% of its market share over the period 1995-2002, while China has gained 63%, Turkey 32% and Mexico 76%, precisely because of the gradual new global specialization by sector³. Although most of the problems following on these trends are expected to be faced by the new member states⁴, Greek processing will also have to find solutions in various areas – using the synergies among them:

² EC, DG Enterprise, *EU Productivity and Competitiveness: an Industry Perspective*, 2003

³ CEPIL, *L'insertion de l'industrie européenne dans la DIT*, 2005

⁴ See EC, *Report on European Competitiveness in 2004*, Summary

- ✓ exploitation of 'mild factors' (time, specialization, customer service, product reliability) and development of advantages other than labour costs
- ✓ development of new sectors and products.

The need is even greater in that the negative impact of international factors weighs heavily on the very areas where Greek structural weaknesses are most pronounced. The problems of Greek processing were made clear in the 2nd economic crisis of 1979 and have their roots in the specific conditions of development of Greek industry throughout that period: development of business activity under a regime of tariff protection, bank financing with 'negative' interest rates, high public participation in the cost of investment (grants and interest subsidies), exceptionally low average size of units, a «family» dimension even in the management of 'large' companies, inherently strong «recycling» of SMEs, attempts at a dirigiste development of driving sectors. Through continual interaction certain virtually permanent characteristics of Greek industry developed: long-term lack of growth, contraction of share of industry in GDP, decline or stagnation in industrial employment, low added value, low degree of outward orientation, intense import penetration, dependence on 'traditional' sectors, continual re-creation of duality between profitable and loss-making businesses, failure to generate innovation and inadequate adoption/adaptation of imported innovation, 'rescue' innovations by the state, resulting only in 'nationalization' of losses and increase in overall debt burden⁵.

Even when some of the above trends appear to have weakened (e.g. in the 'investment spring' of 1986-88 or the generally sustained profitability on own capital) this has been less the result of restructuring action (by businesses or in public policy), and more the impact of favourable international conditions or the implementation of the appropriate macro-economic policy. Evidence of this assertion can be found in the almost permanently low – throughout the whole preceding period – rate of reinvestment, even in conditions of high profitability. The overall result has been that a large portion of Greek industry remains non-competitive and is dominated by very small family businesses and crafts; it shows only limited specialization and its sectoral structure has shown little real change over recent years, with knowledge-intensive products representing only a small, albeit increasing, percentage of total industrial production, which for the most part manufactures products involving only average levels of technology.

International and Greek factors work together to show a worrying trend towards increase in business 'fatalities', a fact which tempers the positive observation that in general Greece is a country with a relatively high rate of business start-ups:

⁵ See analyses in: T. Yiannitsis: *Greek industry: development and crisis*, 1985, K. Vaitos, T. Yiannitsis: *Technological reform and economic growth*, 1987.

TABLE 5: BUSINESS START-UPS AND FATALITIES (%)

1995-2000:	start-ups	fatalities	net result
Austria	7,4	4,9	2,5
Belgium	8,4	8,2	0,2
Finland	12,3	10,6	1,7
Germany	15,7	12,6	3,1
Greece	11,0	7,8	3,2
Ireland	14,2	8,2	6
Italy	8,1	6,5	1,6
Holland	10,2	5,5	4,7
Portugal	13,2	9,1	3,8
Spain	13,3	11,4	1,9
Sweden	8,2	2,0	6,2
UK	10,9	10,3	0,6

EC, DG Enterprise, EU Productivity and Competitiveness: an Industry Perspective, 2003

From the above it appears that Greek industry:

- ✓ has an urgent need for upgrading to favour sectors with higher added value
- ✓ has an urgent need for upgrading to generate higher added value in its 'traditional' sectors,

particularly at a time when new member states with similar industrial structures and lower labour costs are entering the EU.

Finally, a highly significant feature of Greek processing is its spatial concentration: 48% of industrial units, 46% of jobs and 53% of gross production value are concentrated in the prefectures of Attica, Boeotia, Evoia and Corinth, while these same four prefectures, together with the prefecture of Thessaloniki, have 63% of industrial units, 57% of jobs and 65% of gross production value of all Greek processing.

This spatial concentration is a clear sign of the dependence of Greek processing on a) the infrastructures and environmental economies offered by the two major urban centres (Athens and Thessaloniki), and b) their market. It also highlights the sectoral composition, dominated by sectors producing consumer goods:

TABLE 6: SPATIAL CHARACTERISTICS OF GREEK PROCESSING

PREFECTURE	units	Jobs	gross production value (€)	added value (€)	sales (€)
AITOLOAKARNANIA	37	1087	41109448	17342757	39115756
REST OF ATTICA	641	33924	2234843390	628583414	2007782670
BOEOTIA	164	14894	978253616	372717617	852461373
EVOIA	81	7016	258892161	107156103	225704098
FTHIOTIDA	68	4003	202379166	74101609	180090278
FOKIDA	13	196	5107570	1774319	4875351
ARGOLIDA	49	1425	36149940	13339888	31972530
ARCADIA	19	385	14987247	7342421	14660023
ACHAIA	145	6354	257999759	124933922	238397099
ILEIA	32	931	28776091	12155128	25373192
CORINTHIA	63	4704	703139621	139569010	652798754
LAKONIA	12	245	10225220	2634555	8273954
MESSINIA	28	997	48354107	20144012	47647128
REGION OF CAPITAL	1628	70133	1743259617	817612485	1438171417
CORFU	10	147	4838671	1678086	4822358
KEFALLINIA	4	105	3719290	1838282	3692717
LEFKADA-ZAKINTHOS	3	24	797853	198861	798185
ARTA	8	373	12951300	5863107	12637001
THESPROTIA	5	67	1252734	762853	761683
IOANNINA	48	2348	96476220	24427407	91166317
PREVEZA	10	793	25418410	8460797	23609133
KARDITSA	24	379	10772428	3298040	9628929
LARISA	131	6759	192391626	70077717	176270503
MAGNESIA	86	5261	276028129	118311048	229109102
TRIKALA	46	1287	45842468	15182104	43997498
GREVENA	7	145	4113095	850188	3828575
DRAMA	38	1962	39601376	16708360	32783623
IMATHIA	66	4341	162526381	50343581	147517078
THESSALONIKI	819	32576	1390950230	461186714	1252633080
KAVALA	76	3477	91823503	36560579	80004810
KASTORIA	32	527	19770140	5803585	17361773
KILKIS	59	4165	146174895	48564362	129184142
KOZANI	25	858	10880096	5308589	6609592
PELLA	55	2571	80986667	25221028	80007029
PIERIA	32	1283	23707779	10036206	19040958
SERRES	67	1814	47689332	18324201	42445260
FLORINA	8	91	4578782	1712277	4551882
HALKIDIKI	14	729	26518957	12298999	25792300
EVROS	47	1991	87780436	25671332	80195265
XANTHE	46	4572	135732509	56417396	127876361
RODOPI	53	2181	61769908	22864611	58769702
DODECANESE	33	696	17250986	7291494	16655856
CYCLADES	17	966	14302742	8653364	6692938
LESBOS	18	253	6297216	3065201	6165075
SAMOS	4	158	3771647	1723782	3263427
HIOS	6	107	2905963	1341889	2760324
HERAKLIO	87	2763	77653109	29275448	74182915
LASITHI	14	287	7641799	2678121	6977770
RETHYMNO	13	558	19739289	7547719	18757775
HANIA	25	700	21343229	7344052	20478403
TOTAL	5489	294957	11469759433	4117001607	10158325391

NATIONAL STATISTICS OFFICE, COMMERCIAL AND INDUSTRIAL CHAMBER 2002, own processing

It is characteristic that despite twenty-five years of favourable treatment for Thrace under the development acts the three prefectures of the region (Evros, Rodope and Xanthé) have just

2.7% of units, 3.1% of jobs and 2.6% of gross production value. This may indicate

- either that the burden of inadequate business and general infrastructures weighs heavily on remote or disadvantaged regions
- or that public capital subsidies have not been properly targeted (to sectors, areas of the productive process, externalities etc.).

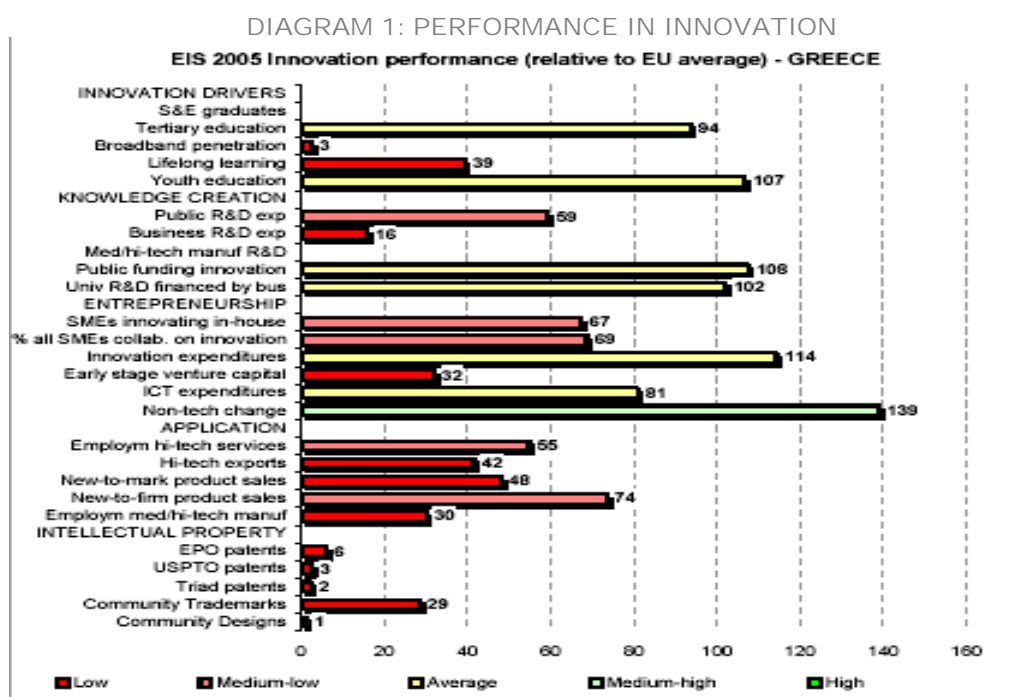
The regional dimension of the problems of Greek processing is very important: the concentration of units and needs leads to a concentration of interventions and public subsidies, and thus to a concentration of investments and therefore employment, and consequently possible new problems of de-industrialization and thus new needs for subsidies.

RESEARCH AND TECHNOLOGY

The national system of innovation, research and technology

Acceleration of the transition to the knowledge economy, a goal which is consistent with the Lisbon Strategy and the requirements of the new policy for cohesion, is a central development priority for Greece in today's ever more demanding European and international environment. The role of innovation, research and technology in this enterprise will be absolutely crucial.

The country's performance in these areas is not impressive. According to the data in the European Innovation Scoreboard for 2005, Greece is ranked 23rd out of the EU-25 (above only Malta and Latvia) and 15th in the EU-15 in respect of performance in innovation⁶. In absolute terms the current situation is depicted through 17 low or average results and 6 which approach the European average, out of a total of 24 indicators for which figures for Greece are available (Diagram 1). Our country only scores well in the area of non-technological change.



The weaknesses of the system involve broadband penetration, lifelong training, investment by businesses in research, venture capital, exports of high-tech products, employment in medium and high technology processing, manufacture of new products and patent protection.

⁶ The overall performance in innovation is calculated using the composite indicator SII, which measures performance and trends over the last three years for 26 individual indicators which quantify the basic components of innovation.

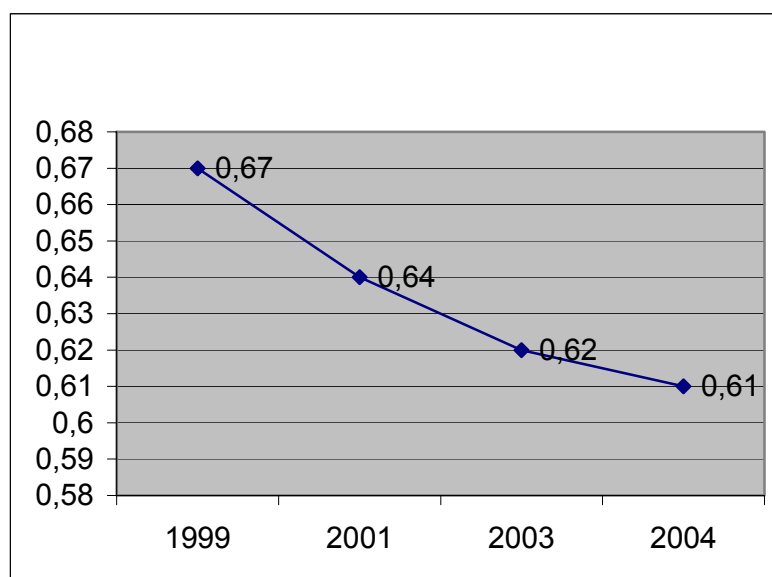
At the same time Gross Domestic Spending on Research and Technological Development (GDSRTD) as a percentage of GDP amounted to just 0.62% in 2003 and 0.61% in 2004, while showing a slight but steady decline since 1999. This does not of course correspond to the real reduction in spending (the absolute GDSRTD values are increasing, as we see in Table 7), but to the fact that the increase in spending on research has been unable to match the rate of increase in GDP, which has remained high over the last decade, given that the sectors responsible for this impressive recent increase do not include knowledge-intensive activities.

TABLE 7: CHANGES IN GDSRTD SINCE 1999

Year	GDSRTD (in m. €)
1999	760,2
2001	851,5
2003	977,78
2004 (provisional figures)	1021,47

Source: Gen. Sec. for Research and Technology

DIAGRAM 2: GDSRTD AS % OF GDP



Source: Gen. Sec. for Research and Technology

Almost half of the country's research activity is conducted by its universities. The involvement of the productive sector is low and has remained at or close to 30% in recent years. The participation of the public research centres and institutes has been about 20%, while the contribution of not-for-profit organizations is practically negligible:

TABLE 8: MAIN AGENCIES ENGAGED IN RESEARCH ACTIVITY (2003)

AGENCY CONDUCTING RESEARCH ACTIVITY	% of GDSRTD
Public Research Centres	20,29
Businesses	32,06
Universities	46,72
Not-for-profit organizations	0,93

Source: Gen. Sec. for Research and Technology

The low level of involvement of the country's businesses in its research endeavours is also reflected in the breakdown of research spending by source of funding. In 2003 industry supplied just 28.23% of investment in research and development, while about 70.55% came from public sources (domestic and foreign):

TABLE 9: SOURCES OF FUNDING FOR RESEARCH ACTIVITY (2003)

FUNDING SECTORS FOR RESEARCH ACTIVITY	% of GDSRTD
Public	48,97
Businesses	28,23
Foreign sources (mainly EU)	21,58
Not-for-profit organizations	1,22

Source: Gen. Sec. for Research and Technology

It should be noted that in more technologically advanced countries these percentages are reversed.

In respect of state funding for research (SFRTD), Table 10 shows relevant trends since 1999. SFRTD increased by 17% (at current \$ PPP [purchasing power parity]) from 2000 to 2004:

TABLE 10

SFRTD	1999	2000	2001	2002	2003	2004	2005
(m €)	349,45	420,1	416,4	406,9	456,37	528,3	558,1

Source: Gen. Sec. for Research and Technology

Analysis of SFRTD by NABS scientific field shows more or less stable allocation over the last six years (Table 11). However, it is worth noting the impressive peak in funding in the space sector in 2005 (sixfold rise in funding from 2000 to 2005), a result of Greece's becoming a full member of the European Space Agency⁷. The largest percentage of funding comes from the General University Funds (47.5 % in 2005); 9 % corresponds to 'non-oriented research'; 23 % is channelled to 'economic growth' and about 17% to the health, social structure and environment sectors:

⁷ The relevant agreement was signed in the summer of 2004 and ratified in early 2005.

TABLE 11: STATE FUNDING FOR RESEARCH (SFRTD) BY FIELD
(IN M. €) – 2005 FIGURES ARE PROVISIONAL

	2000	2001	2002	2003	2004	2005
SCIENTIFIC FIELD						
* 1. Exploration and exploitation of earth	15,30	17,50	14,49	14,85	18,41	19,85
* 2. Infrastructures and general planning of land use	14,40	12,80	10,78	14,47	18,43	16,21
* 3. Environmental control and protection	20,80	17,00	13,48	18,00	22,82	22,29
* 4. Protection and improvement of human health	34,60	27,30	24,11	30,76	39,08	38,25
* 5. Generation, distribution and rational use of energy	7,80	6,60	6,13	9,74	12,57	11,97
* 6. Agricultural production and technology	25,70	30,30	26,49	22,73	27,99	30,5
* 7. Industrial production and technology	39,00	36,30	25,75	34,69	48,11	51,51
* 8. Social structures and relations	27,20	21,70	15,90	23,84	27,46	31,94
* 9. Exploration and exploitation of space	2,10	1,00	1,11	1,23	2,98	11,57
*10. General University Funds	180,60	188,70	216,34	224,73	252,47	265,55
*11. Non-oriented research	47,60	52,77	48,43	57,26	49,91	51,37
12. Other research (apart from defence)	3,20	0,99	0,90	1,14	5,19	4,14
*13. Defence	1,80	3,45	2,98	2,93	2,89	2,95
*14. TOTAL	420,10	416,40	406,90	456,37	528,31	558,1

Source: Gen. Sec. for Research and Technology

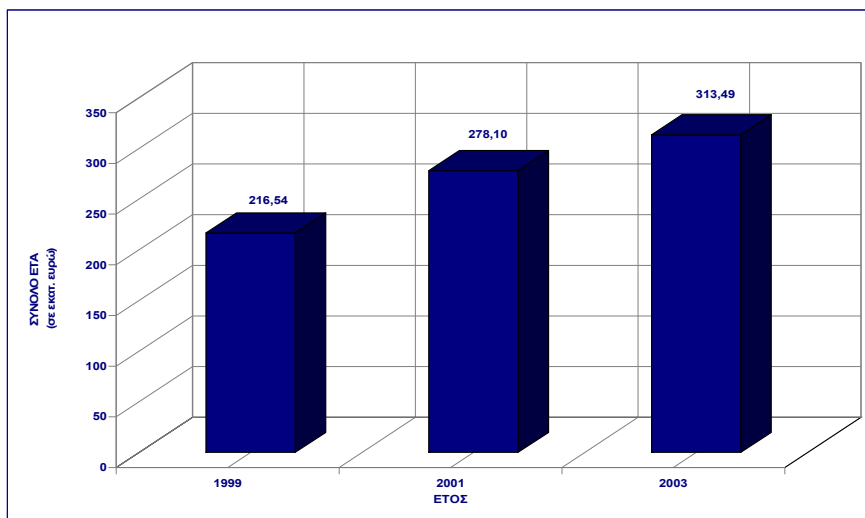
The Business Sector

The low level of involvement of businesses is one of the weakest points of the Greek system for innovation – research and technology, and thus requires greater analysis. The low contribution to research activity may be attributed to more general structural weaknesses in the Greek production base (many small businesses, traditional sectors, low level of resources in areas generating technological innovation like pharmaceuticals etc., transfer of ready and mature turnkey technology solutions rather than in house RTD within businesses, low level of scientific knowledge in business personnel, prevalence of risk avoidance behaviours, and so on).

Nevertheless, on the basis of the findings of the study «Measurement of R&TD activities in businesses – year 2003» the trends are encouraging:

- Spending by businesses on R&TD increased from 216.54m € in 1999 and 278.10m € in 2001 (increase of 28,4%) to 313.49m € in 2003 (increase of 16.3%). The overall increase from 1999 to 2003 was 44.8%:

DIAGRAM 3: RTD SPENDING BY GREEK BUSINESSES (1999 – 2003)



Source: Gen. Sec. for Research and Technology

- Although RTD indicators have been slightly downward over the period 1999 – 2003 as percentages of GDP, business involvement remains steady and slightly upward in direction:

TABLE 12: INDICATORS OF RESEARCH AND TECHNOLOGICAL DEVELOPMENT

	GDSRTD/GDP	Public Spending on RTD/GDP	Public Spending on RTD/GDSRTD
1999	0,67%	0,18%	27,23%
2001	0,63%	0,21%	33,05%
2003	0,63%	0,20%	32,16%

Source: Gen. Sec. for Research and Technology

- As for the geographical distribution of businesses engaged in research activity, the overall majority are located in Attica (75.41%) with a significant part also played by those in N. Greece⁸ (18.06%). Other regions (NUTS 1) make a small (Central Greece⁹ 5.14%) or insignificant (Aegean Islands - Crete 1.39%) contribution:

TABLE 13: DISTRIBUTION OF BUSINESSES ENGAGED IN RESEARCH ACTIVITY BY NUTS 1 (4 REGIONS) (2003)

ATTICA	75,41%
N. GREECE	18,06%
CENTRAL GREECE	5,14%
AEGEAN ISLANDS – CRETE	1,39%

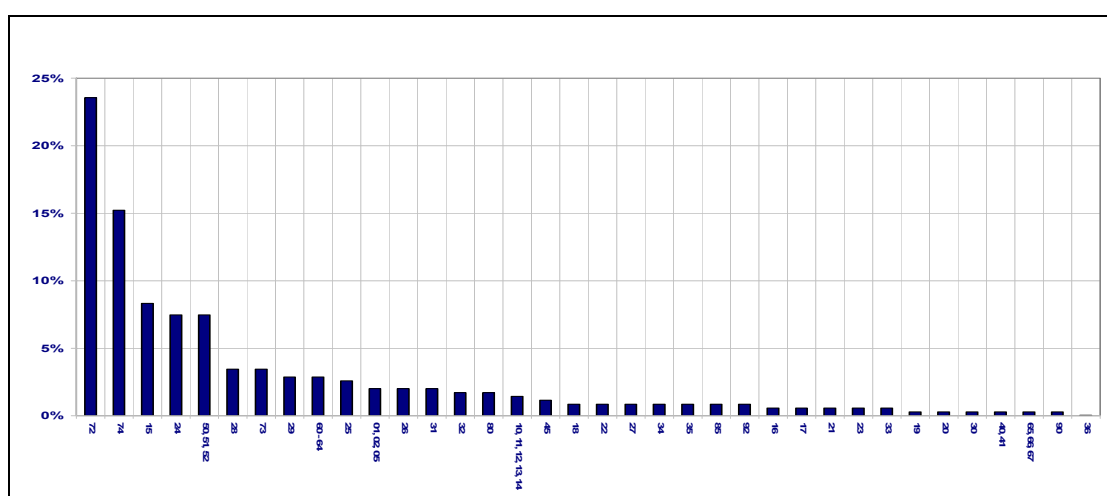
Source: Gen. Sec. for Research and Technology

⁸ W. Macedonia, C. Macedonia, E. Macedonia-Thrace, Thessaly

⁹ Epirus, Ionian Islands, W. Greece, Central Greece, Peloponnese

- On the basis of number of businesses by two-digit sector of economic activity (Diagram 4), sector 72 'Information technology and related activities' leads by a long way, at a contribution level of 23.56%, followed by:
 - 74: Other business activities (services) 15.23%
 - 15: Food and drinks industry 8.33%
 - 24: Chemicals and chemical products 7.47%
 - 50, 51, 52: Wholesale and retail trade – Auto repair etc. 7.47%
 - Other sectors have a level of contribution below 5%

DIAGRAM 4: DISTRIBUTION OF BUSINESSES ENGAGED IN RESEARCH ACTIVITY BY SECTOR



Source: Gen. Sec. for Research and Technology

- 73.51% of businesses declaring spending on research are small and have a total staff of under 50 persons. Large businesses accounted for 10% of the total and medium-sized businesses 16.64%.
- However, it is estimated that the largest percentage of in-house business spending comes from large and medium-sized businesses (Table 14). More specifically, about 50% of the 313.49m € spent on R&TD in 2003 was from businesses with a total workforce of over 249 persons. Moreover, it is estimated that the sum spent on R&TD in-house by medium-sized businesses, i.e. those with a workforce of from 50 to 249, amounted to 104.97m Euro in 2003. This sum represents 33.48% of the total amount of in-house spending for 2003. Finally, the smallest percentage of spending in the area of scientific and technological research (19.13%) was that spent by small businesses.

TABLE 14: ALLOCATION OF SPENDING ON R&TD BY SIZE OF BUSINESS (2003)

TOTAL WORKFORCE (PERSONS)	R&TD (m €)	ALLOCATION FOR RTD BY SIZE OF BUSINESS
Up to 49 persons	59,94	19,13%
50-249 persons	104,97	33,48%
More than 250 persons	148,56	47,39%
TOTAL	313,48	100%

Source: Gen. Sec. for Research and Technology

- Of businesses conducting research, 45% have a special R&TD department and 40.33% of businesses conducting research are relatively new businesses (founded since 1990).
- In respect of source of funding for R&TD, it should be noted that self-financing is the most important source of funding, although over time there has been a significant increase in state resources (Table 15).
- Staff salaries account for the largest portion of spending on R&TD, followed (a very short distance behind) by capital expenditure and other current expenditure.

TABLE 15: SOURCES OF BUSINESS R&TD FUNDING (2003)

SOURCE OF FUNDING	AMOUNT (m €)	PERCENTAGE
Self-financing	236,45	75,43%
Structural programmes co-financed by the Greek state (OP Competitiveness, Law 2601/98 etc.)	45,93	14,65%
Other domestic sources		
Domestic public enterprises	1,05	0,34%
Domestic private enterprises	0,35	0,11%
Other domestic sources	0,66	0,21%
Greek institutions of tertiary education	0,41	0,13%
Foreign sources		
EU framework programme (competitive programmes)	23,36	7,45%
Foreign businesses	2,65	0,85%
Foreign governments	0,00	0,00%
Foreign institutions of tertiary education	0,10	0,03%
Foreign private not-for-profit legal entities	0,00	0,00%
International organisations	0,17	0,05%
Other foreign sources.	2,35	0,75%
TOTAL	313,49	100,00%

Source: Gen. Sec. for Research and Technology

Regional Inequalities

The regional dimension is one of the most important parameters in the design of the current Operational Programme, given that for the first time Greece has five regions which do not belong to the Exclusively Objective 1 category. Two of the regions in question (Attica and Central Macedonia) are overwhelmingly ahead of other regions in terms of research activity, in all sectors (Table 16). Specifically, the region of Attica has about 58% of all GDSRTD, 76% of business spending, 62% of spending by public research centres and about 44% of spending by universities. It is followed by C. Macedonia with 14.52% of all GDSRTD, 10.5% of business spending, 11% of spending by public research centres and about 19% of spending by universities.

International experience shows that for a region to be competitive through its system of generating and exploiting knowledge and converting it into economic and social prosperity it

needs to have a range of key parameters, namely:

- The existence of a suitable infrastructure for the generation and exploitation of knowledge, such as universities and research/technology centres, as well as intermediate mechanisms for dissemination and exploitation of the results of research, technoparks, incubators, liaison offices, and so on.
- The existence at the same time of effective networks to promote increased demand for new knowledge, i.e. close synergy and cooperation with industries and businesses, individually and/or in clusters.

On the basis of the above, the Greek regions present the following characteristics:

- Crete has 18% of spending by public research centres and 8% of that by universities – reflecting the concentration of important research centres in this region. However, it lags behind seriously in the business sector (0.66%).
- In the university/public research centre sector there are satisfactory levels of activity in W. Greece while Epirus, E. Macedonia-Thrace, Thessaly and N. Aegean are still developing. Of these only W. Greece and E. Macedonia-Thrace have activity at levels over 1% in the business sector.
- By way of contrast, the business sector shows considerable levels of activity, not only in Attica and Central Macedonia, but also in Central Greece and the Peloponnese – which constitute, essentially, the broader industrial zone around Attica.
- The regions of W. Macedonia, S. Aegean and the Ionian Islands perform at below 1% in all sectors.

TABLE 16: REGIONAL DISTRIBUTION OF SPENDING ON R&TD IN TOTAL AND BY SECTOR

	GDSRTD	Businesses	Public Research Centres	Universities	Non-profit organizations
Greece	100%	100%	100%	100%	100%
E. Macedonia-Thrace	2,57%	1,22%	1,41%	4,04%	0,00%
C. Macedonia	14,52%	10,53%	10,98%	18,78%	15,44%
W. Macedonia	0,58%	0,00%	0,76%	0,91%	0,00%
Thessaly	2,32%	0,52%	1,05%	4,15%	0,00%
Epirus	2,47%	0,04%	0,82%	4,91%	0,00%
Ionian Islands	0,29%	0,00%	0,11%	0,58%	0,00%
W. Greece	6,94%	2,48%	2,84%	11,92%	0,00%
C. Greece	1,15%	3,15%	0,58%	0,04%	0,00%
Peloponnese	1,87%	5,07%	0,74%	0,09%	6,24%
Attica	58,21%	76,16%	62,39%	43,66%	78,31%
N. Aegean	0,99%	0,00%	0,23%	2,01%	0,00%
S. Aegean	0,53%	0,18%	0,33%	0,87%	0,00%
Crete	7,58%	0,66%	17,75%	8,06%	0,00%

Source: Gen. Sec. for Research and Technology

The above figures make all too clear the top-heavy concentration of the Greek system in the region of Attica, as well as the significant differentiation among the various other regions of the country.

Human Resources

In 2003 a total of 57,257 persons were employed in research and technological activities in Greece, of whom 28,284 were researchers. Table 17 presents the changing numbers of researchers in equivalent units of full-time employment between 1999 and 2005.

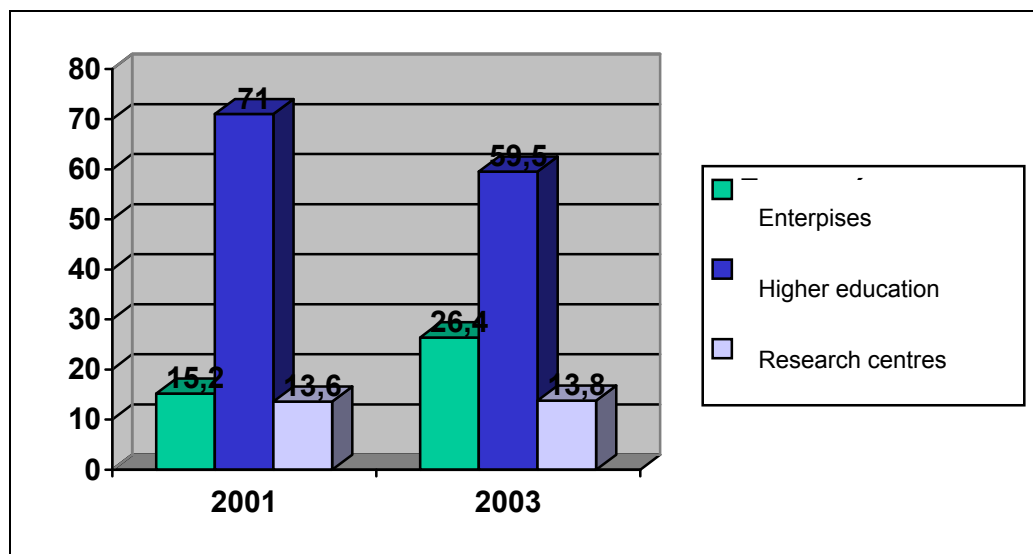
TABLE 17: NUMBER OF RESEARCHERS (2003)

Year	Number of researchers (individual persons)	Number of researchers (FTE)
1997	20.643	10.964,3
1999	29.559	14.747,6
2001	26.340	14.371,3
2003	28.058	15.631,31

Source: Gen. Sec. for Research and Technology

Diagram 5 shows the changes in distribution of researchers by sector of activity. The percentage of employment of researchers in businesses rose from 15.2 % in 2001 to 26.4 % in 2003, with a corresponding decline in employment at universities from 71% in 2001 to around 60% in 2003. Employment in public research centres remained relatively constant at around 14%.

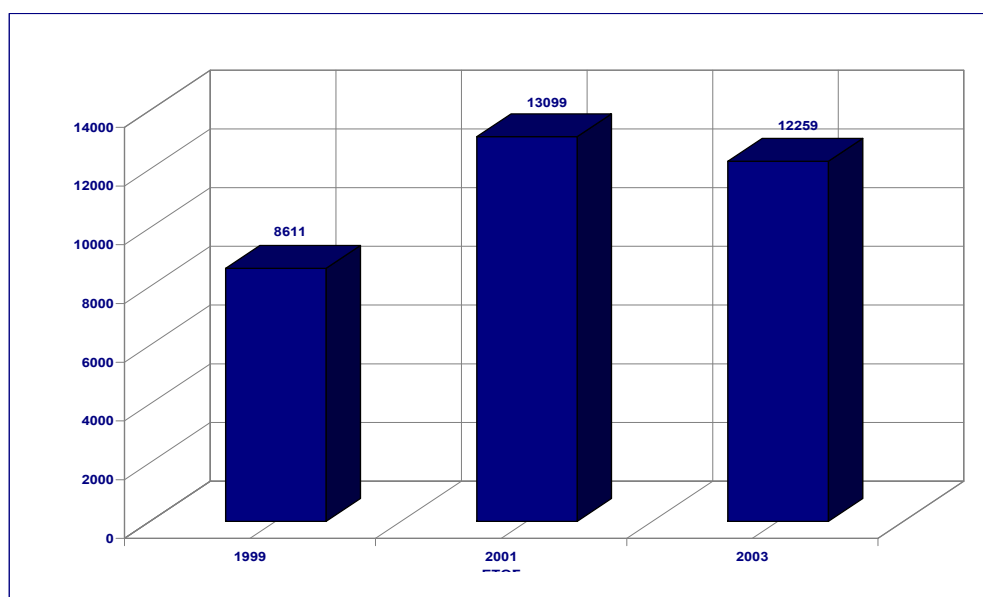
DIAGRAM 5 EMPLOYMENT OF RESEARCHERS BY SECTOR OF ACTIVITY (EQUIVALENT UNITS OF FULL-TIME EMPLOYMENT)



Source: Gen. Sec. for Research and Technology

In the business sector the total number of personnel involved in research activity increased by 52.1% between 1999 and 2001, but fell by 9.8% between 2001 and 2003. At the same time productivity increased, given that despite the reduction in staff in terms of individual numbers, employment in businesses rose in terms of FTE (from 11,171 man-years in 2001 to 11,608 in 2003). The total number of persons engaged in research and technological development in businesses rose to 12,259 in 2003 from 8,611 in 1999 (overall increase of 42.4%) – Diagram 6.

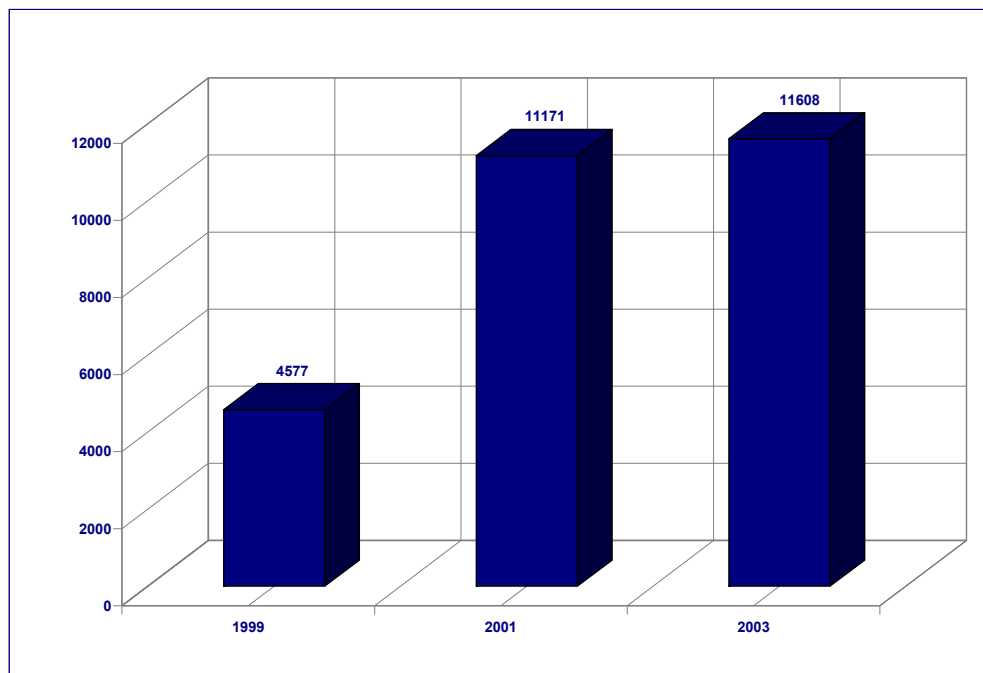
DIAGRAM 6: TOTAL NUMBER OF PERSONS EMPLOYED IN R&TD PER YEAR



Source: Gen. Sec. for Research and Technology

The time spent in full-time employment in research activity is increasing continually. Diagram 7 shows the upward trend between 1999 and 2003, in terms of man-years.

DIAGRAM 7: MAN-YEARS OF EMPLOYMENT IN R&TD PER YEAR



Source: Gen. Sec. for Research and Technology

Reputable scientific publications by Greek researchers accounted, in 2003, for 0.76% of global production, with an annual rate of increase over the period 1995-99 in the order of 5% (Key Figures 2005). Greece is ranked 14th in the EU-25, with 525 publications per million inhabitants.

The ratio of publications to total number of researchers¹⁰ is very high in Greece, standing at 1.53 publications/researcher for the five years 1995-1999, ranking the country 9th in the global tables¹¹! However, production of high scientific interest is low, as calculated on the basis of the number of references per publication (Key Figures 2002), while the number of patents taken out on research results is negligible (0.1 % of European patents, below 0.1% of American).

Greek researchers perform well in attracting funding from abroad, mainly from the EC Framework Programme for Research, Technological Development and Demonstration. The level of success of Greek agencies, as expressed by the number of participations in approved projects, is high, especially in particular sectors such as ICTs, sustainable development, global change and ecosystems, as well as nano-technologies and nano-sciences, multifunctional materials and new production processes and systems.

Despite the relatively low number of researchers, the upward trend in employment of research personnel in Greek research agencies, and especially in businesses, the wealth of scientific production, the substantial results of Greek research efforts (publications per researcher) and the successes enjoyed by Greek researchers in European competitive programmes all make Greek personnel a robust element in the Greek system for innovation and research.

¹⁰ In FTE

¹¹ Corresponding values for the USA 0.86, Japan 0.46, Finland 1.42, Germany 0.99 and China 0.13

ENERGY

The country's energy policy supports and serves the major policy objective of improving competitiveness, and is based on three main directions: the first of these involves the promotion of major international energy projects and links in the natural gas and electricity sectors, upgrading the country's geostrategic position in energy terms. The second direction of energy policy has as its key target the secure supply of the market with electricity, natural gas and oil, the gradual reduction of the country's dependence on oil and the protection of the environment. The third direction is linked with the promotion of energy investment, especially in the areas of renewables, expansion of the network and use of natural gas, energy-saving, etc.

Natural gas

In 1988, in the context of the strategic decision taken by the Greek state to increase penetration of natural gas, the Public Gas Enterprise (DEPA) was set up to develop a network which would bring natural gas to as many of the country's regions as possible. Currently the National Natural Gas System consists of:

- ✓ Main high pressure pipeline (70 barg), 511km in length, running from the Greek-Bulgarian border at Promachonas, Serres, to Patima, Elefsina.
- ✓ High pressure branch lines (70 barg), total length 450 km
- ✓ 68 valve stations along the high pressure lines
- ✓ Measuring station at Strimonohori, Serres
- ✓ 4 operating and maintenance centres at: Patima, Nea Mesimvria, Ambelia and Xanthi
- ✓ 25 measurement and control stations
- ✓ Remote supervision and control system
- ✓ Liquefied natural gas station on the island of Revythousa
- ✓ Medium pressure network, outside the areas of activity of the three existing natural gas companies, total length 130 km
- ✓ Two vehicle supply stations

In 2005 consumption of gas in the Greek market amounted to 2.7 billion Nm³/year and consumption for 2006 is expected to exceed 3.2 billion Nm³/year. The level of participation of natural gas in the country's energy balance amounts to 6.7 % and is expected to increase significantly in the coming years, helping to reduce the country's dependence on oil and to improve the environment. To date the main high pressure network infrastructure has been constructed and branch lines have been developed to supply the most energy-hungry regions of the country. However, in order to increase natural gas penetration of the domestic, commercial and industrial sectors it will be necessary to develop new high pressure lines and distribution networks in new regions, and to upgrade and/or construct new gas input points to ensure uninterrupted supply.

Electricity

The Electricity Transmission Network consists of the mainland grid and the islands linked to it, comprising both high (150 kV and 66 kV) and extra high (400 kV) voltage lines. The main components of the existing transmission system are as follows:

I. High Voltage / Medium Voltage Sub-Stations :

192 150 kV / MV voltage reducing sub-stations, of which 173 serve the needs of customers of the distribution network, and 14 the needs of the network in the Attica region, while 4 are used to supply mine requirements and one serves the pumping needs of the Polyfyto hydroelectric station. 11 sub-stations receiving power from wind farms, of which 8 are used exclusively for links to wind farms, while 3 are used also to serve loads. Voltage boosting sub-stations at 31 generating stations. 27 150 kV / MV voltage reducing sub-stations serving the facilities of high voltage customers.

II. Extra-High Voltage Centres

Extra-High Voltage Centres are the points linking the 400kV system with the 150kV system and serve the need to dispatch loads to the 150 kV system. There are 13 Extra-High Voltage Centres with one or more three-coil auto-transformers and 3 Extra-High Voltage Centres which also serve the need to boost voltage from generating units to the 400kV system.

III. Transmission Lines

The System has high and extra-high voltage transmission lines of various kinds and types. The table below shows the lengths of the overhead transmission lines:

TABLE 18: LENGTHS OF OVERHEAD POWER LINES

Level of voltage (kV)	Circuit	Power line description	Total length (km)
66	Simple	E/66	40
150	Simple	E/150	2.630
150	Simple	B/150	2.040
150	Double	2β(ε)/150	245
150	Double	2B/150	5.850
400	Simple	B'B'/400	280
400	Double	2B'B'/400	3.440
400	Simple	B' B'B'/400	285

Source: GEN. SEC. DEVELOPMENT

In addition to the overhead powerlines described above, the system also comprises: 177 km of underground and underwater cables carrying 150 kV, 13.5 km of underwater cables carrying 66 kV, 106 km of overhead line and 160 km of underwater cable carrying 400 kV DC (link with Italy), 190 km of high voltage underground cable carrying power within densely populated areas (Athens and Thessaloniki).

IV. International Connections

Since October 2004 the national grid has been operating in synchronous parallel with the European networks of the UCTE, via 400 kV and 150 kV links with the grids of Albania, Bulgaria and FYROM. It is also linked non-synchronously, via underwater DC cable, with Italy. The existing international links help to ensure the country's supply, especially at peak times, and to create a new, broad electricity market which operates for the benefit of producers, traders and consumers – and therefore of the national economy.

In order to develop the system further the Hellenic Transmission System Operator (HTSO-DESMIE) is preparing, for Ministry of Development approval, a Study for the Development of the Transmission System. The rolling study will last five years and is designed to result in a fully documented development programme allowing the operation of the System to meet the needs laid out in the Codes for Management of the System and Power Transactions (Min. of Dev. Δ5/ΗΛ/Β/οικ. 8311/09.05.2005). Given that the main characteristic of the Greek power system is the concentration of generating stations in the northern part of the country (W. Macedonia), with the main centre of consumption in the south (Attica and Peloponnese) there is a serious geographical imbalance between generation and consumption, which results in problems of security of supply and instability in particular, with consequent difficulties in maintaining satisfactory levels of power in the southern system at peak hours.

Since the international links are also located in the north there is an even more urgent need to implement contemporary energy infrastructures and private energy investments to develop further the system for transmission and distribution of electric power.

Renewable sources and energy-saving

The total capacity of the stations generating power from renewables (not counting the major hydroelectric projects), and in operation by June 2006, is 2.2 billion kWh, with 77.4% derived from wind farms, 13.6% from small hydroelectric plants and 9% from other forms of renewable energy (bio-gas, bio-mass, photovoltaic cells):

TABLE 19: INSTALLED POWER OF RENEWABLE ENERGY SYSTEMS IN MW

Region	Wind farms	Small hydroelectric plants	Solar cells	Bio-mass	TOTAL
E. Macedonia-Thrace	163,3	0,9	0,0	0,0	164,2
Attica	0,1	0,0	0,2	20,70	20,8
N. Aegean	28,4	0,0	0,0	0,0	28,4
W. Greece	1,2	17,5	0,0	0,0	18,7
C. Macedonia	17,0	14,0	0,0	2,7	33,8
Epirus	0,0	11,0	0,0	0,0	11,0
Ionian Islands	10,2	0,0	0,0	0,0	10,2
Thessaly	0,0	4,9	0,0	0,4	5,3
Crete	96,4	0,6	0,6	0,2	97,7
S. Aegean	19,5	0,0	0,2	0,0	19,7
Peloponnese	0,0	1,0	0,0	0,0	1,0
C. Greece	204,4	20,1	0,0	0,0	224,5
Total	540,5	70,0	1,0	24,0	635,5

(ENERGY REGULATOR FIGURES, JUNE 2006)

Apart from the facilities listed in the above table, permits have at this moment been issued to install renewable energy stations with a total power of 400.1 MW, of which 355 MW will be generated by wind farms, 39.5 MW by small hydroelectric plants and 5.6 MW by bio-mass stations.

A reliable sign of the investment interest in the RES sector is the fact that the total power to be generated from generating licences issued to date is 5.76 GW.

Natural resources

Minerals

Greece has substantial reserves of minerals, including lignite, bauxite, magnesite, composite sulphurous minerals, ferro-nickel minerals, bentonite, perlite, marble, etc. The country also has a long tradition of mining and quarrying. However, it lags behind in such areas as applied research, innovation and the use of ICTs in exploiting these resources, despite the large number of companies active in the mining and quarrying sectors. What is more, businesses in these sectors have also been slow to take on the ever increasing number of environmental commitments required and to meet the new and demanding health and safety requirements. Minerals are regarded as a commodity of national importance, with significant benefits for the balance of payments because of the sector's pronounced orientation towards exports. For example, exports of pumice, bentonite, perlite and marble in 2004 amounted in value to 79,250,000€, while it should be noted that global demand for raw materials is currently heating up. Furthermore, the sector makes an important contribution to employment and to alleviating regional inequalities, while its most important feature is that not only is it linked with other sectors of our economy from infrastructures to the tertiary sector, but is also a significant factor in the general growth of the economy, mainly owing to the lack of basic infrastructures when compared with other European countries. However, exploitation of mineral resources has certain inherent problems and special issues. The combination of these with the new dimension of globalization, owing to rapid geopolitical developments, especially since 1990, has had an adverse impact on the competitiveness of Greek and European companies engaged in mining activities, when compared with their counterparts in non-EU countries. This is mainly due to the differences between EU and other countries in respect of environmental specifications, work and safety requirements and labour costs.

Water resources

Law 3199/2003 brings Greek law into line with the provisions of Directive 2000/60/EC on the protection and management of surface and underground water resources, in respect of both quality and quantity, in standard form and on the scale of river catchment areas. Under the new legislative framework the competences of the Ministry of Development for management of water resources (uses) are concentrated in the areas of industry (including bottling and commerce) and energy. The management studies prepared under the 3rd CSF are a basic infrastructure and development project. In essence, they support the optimal choice in construction and operation of new projects, in order to cover satisfactorily water supply and irrigation uses, as well as the country's energy needs, and finally the rational management of the country's water resources.

Geothermal potential

Despite the country's rich geothermal potential, owing to its tectonic structure and high seismicity, along with a number of other factors, the use of geothermal energy (a renewable

and environmentally friendly source of energy) is not only not widespread but in fact often leads to local protest and resistance.

Geological environment

The geological environment, with its various inherent geological risks, can generate a variety of natural disasters (earthquakes, floods, land subsidence etc.). The potential for development of infrastructures (settlements, networks, projects etc.) is dependent on man's capacity to predict and prevent the adverse impact of natural disasters, taking steps to render infrastructures safe. Further research, study and exploitation of the geological environment is a necessity for Greece.

TOURISM

Tourism is the most dynamic and competitive sector in the Greek economy, in international terms, while it is estimated that it offers significant potential for growth over the next decade.

Since the early 1990's tourist activity has been the major production sector and has provided the main exportable product in global terms. Development of tourism over the last 40-50 years has advanced faster than the rate of increase in global GDP. It is now estimated that tourism represents 12% of private consumption, generates 6% of global gross product and provides more than 7% of jobs in global terms.

In this context the current picture of tourist activity in Greece presents the following basic quantitative and qualitative characteristics:

Contribution to GDP and employment

The contribution of the tourist sector to employment and GDP in the fifteen member states of the European Union in 2002 was substantial. For the Mediterranean countries of the EU the contribution of the sector to GDP and employment was over 11%, and for Greece over 15%:

TABLE 20: COMPARATIVE POSITIONS - TOURISM

COUNTRIES	Tourism as % of GDP	Employment in tourism as % of total employment
Spain	18,38	20,11
Portugal	15,40	16,96
GREECE	15,00	17,38
Austria	14,85	16,77
Luxembourg	12,42	14,54
France	12,30	13,94
Finland	11,49	12,01
Italy	11,36	12,20
UK	10,87	10,22
Belgium	10,25	11,03
Germany	9,88	10,78
Holland	9,81	9,65
Denmark	8,74	8,81
Ireland	8,53	7,68
Sweden	7,52	7,22

Source: WTTC, 2003 in Association of Greek Tourism Businesses, *Tourism and Employment*, 2003.

Gross Added Value

Gross added value in the Greek hotel and restaurant sector in 2004 was 8,821.9m € corresponding to 7.57% of national gross added value. The sector has an increasing contribution to total gross added value, in relation to past years. In 1995 its share was 6.53%, while in 2000 it had risen to 6.87%. At the same time, in the EU the contribution of the sector to total gross added value declined over the period 1995-2004 falling from 2.64% in 1995 to 2.42% in 2004.

TABLE 21: CHANGING CONTRIBUTION OF HOTEL-RESTAURANT SECTOR TO GROSS ADDED VALUE (M €)

		Greece	EU15	EU25
1995	All sectors	83.062,9	6.040.013,0	6.245.919,8
	Hotels – restaurants	5.421,8	161.152,4	164.959,0
	Sector share in total	6,53%	2,67%	2,64%
2000	All sectors	96.851,9	6.941.470,6	7.194.183,6
	Hotels – restaurants	6.658,5	183.169,0	187.552,6
	All sectors	6,87%	2,64%	2,61%
2004	All sectors	116.587,5	7.396.117,0	7.689.250,2
	Hotels – restaurants	8.821,9	181.915,4	186.257,7
	All sectors	7,57%	2,46%	2,42%

Source: Eurostat Database, 2006. Processed by Support Consultant

Capacity of tourist sector

According to recent figures from the National Statistics Office (Tourism Statistics, 2005) in 2005 Greece had 9,036 hotels and similar accommodation, and 341 organized camping sites. Moreover, in the regions most developed for tourism there was a considerable number of rented rooms awarded the special Hellenic Tourism Organization symbol. Most tourist accommodation has been recently renovated and modernized and offers contemporary amenities prepared to high specifications:

TABLE 22: TOURIST INFRASTRUCTURE – BASIC FIGURES, GREECE AND EU (M. €)

		Greece	EU15	EU25
1990	Units	6.713	191.469	
	Beds	438.355	7.833.987	
	Average size	65	41	
1995	Units	7.754	189.980	195.922
	Beds	557.188	8.615.733	9.163.551
	Average size	72	45	47
2000	Units	8.342	192.867	202.806
	Beds	607.614	9.635.271	10.356.059
	Average size	73	50	51
2004	Units	8.899	189.582	201.066
	Beds	668.271	9.952.275	10.783.463
	Average size	75	52	54

Source: Eurostat Database, 2006. Processed by Support Consultant.

Between 2000-2005 there was an increase of 8.4% in the number of hotels and related units, while the overall increase over the period 1990-2005 was in the order of 25.8%. However, the number of organized campsites declined slightly, falling by 2.6% over the period 2000-2005, whereas the overall change over the fifteen-year period was positive, amounting to an increase of 7.9%. On the EU-25 level, the country's share in the total number of hotels and related accommodation in 2004 amounted to 4.4%, up from 4.1% in 2000.

In terms of categories of hotel accommodation in Greece, the most common form of accommodation is the 3rd class (2 stars under the new hotel rankings), representing 50% of all units. This is followed by the 2nd class (3 stars), representing 18.9% of all units, while the last category (4th or 5th class – or one star) accounts for 19.1% of all units. First class and luxury hotels (5 and 4 star) represent just 12.1% of the total.

Apart from the various kinds of accommodation, domestic tourist supply is supported by a whole range of sub-sectors exclusively engaged in the provision of tourist goods and services. The approximate numbers are as follows: 4,850 travel agencies, 750 road transport businesses, 1,500 car hire offices, 200 leisure boat charter offices offering a choice of more than 4,500 leisure boats, 10,500 businesses dealing in souvenirs of all kinds, 2,000 qualified self-employed guides, and about 30,000 catering and entertainment businesses, restaurants, cafés, etc. indirectly serving domestic tourist supply.

A full description of the range covered by the tourist industry must also include seasonal goods and services by a whole host of businesses in various sectors, not exclusively serving the tourist trade: for example – banks, air, sea and road transport, postal and medical services, service stations, food and other shops, airport, port and railway services; and behind them, of course, almost the whole range of sectors producing consumer goods and a significant part of those sectors producing capital products.

Special forms of tourism

Apart from the services and products already mentioned, annual tourist consumption is also fed by a host of other facilities providing special tourism infrastructure, including conference centres of all sizes, marine therapy centres, golf courses, casinos, a significant number of marinas, skiing resorts, spas and all the other places visited by tourists which make up the overall picture of the tourist industry in Greece. Although there is insufficient reliable statistical data on these sectors, we offer as some indication figures for three of the sectors where Greece is believed to have a strong comparative advantage, and which have the potential for significant development over the coming years: cruise tourism, sea and leisure craft/yachting tourism, and conference tourism.

In respect of cruise tourism, figures presented by the Association of Greek Travel Agents (HATTA) at the forum 'Greece: International Cruise Nexus for the Eastern Mediterranean' (October 2006) indicate that since 1980 the sector has grown at an annual rate of 8.1% with more than 100m passengers taking cruises of more than two days duration. More than 14,000 Greeks take an annual cruise, in a global market which attracted 11.2m customers in 2005, an increase of 6.9% over the previous year. According to figures from the Piraeus Port Authority, 184,763 passengers set off for a cruise holiday from the port of Piraeus in 2005 (an increase of 20.7% on the previous year), while transit passengers numbered 635,090, an increase of 24.7% on the previous year. In practical terms, then, just two in eight tourists cruising the Greek islands depart from Piraeus. Foreign companies' ships ply between the Aegean islands but for certain reasons avoid using Piraeus as their starting point. The reason being that Greece does not allow circular cruises from Piraeus or any other Greek island (i.e. cruises starting and ending at these ports) to be offered by any ship not flying a Greek or EU flag. Since most of the cruise ships are flying the flag of non-EU countries, they can only visit Greek destinations.

TABLE 23. PASSENGER MOVEMENT – COASTAL NAVIGATION AND CRUISE SHIPS

NUMBER OF PASSENGERS	2002	2003	2004	ANNUAL CHANGE (%)	2005	ANNUAL CHANGE (%)
DOMESTIC						
COASTAL NAVIGATION	7.593.359	8.008.139	7.554.200	-5,7%	7.820.450	3,5%
ARGOSARONIKOS	3.532.414	3.705.130	3.605.074	-2,7%	3.664.313	1,6%
TOTAL Domestic (A)	11.125.773	11.713.269	11.159.274	-4,7%	11.484.763	2,9%
FOREIGN						
REGULAR LINE	50.122	46.104	95.195	106,5%	105.929	11,3%
CRUISE SHIP	152.433	127.777	153.089	19,8%	184.763	20,7%
PASSING THROUGH	469.528	649.458	509.268	-21,6%	635.090	24,7%
TOTAL Foreign (B)	672.083	823.339	757.552	-8,0%	925.782	22,2%
TOTAL (A) + (B)	11.797.856	12.536.608	11.916.826	-4,9%	12.410.545	4,1%
FERRY TRAFFIC (C)	8.168.496	8.397.292	8.339.053	-0,7%	7.977.880	-4,3%
TOTAL PASSENGER TRAFFIC (A) + (B) + (C)	31.092.125	32.647.169	31.415.153	-3,2%	31.873.188	0,6%

Source : Piraeus Port Authority

Current capacity of the country's tourist harbours to accommodate leisure craft is shown in the following table.

TABLE 24: MOORING INFRASTRUCTURE

		No. of installations	Moorings
Tourist harbours (marinas)	Planned	49	13.824
	Operating	22	7.818
Havens – anchorages	Planned	57	3.554
	Operating	21	1.353
Hotel marinas	Planned	7	241
	Operating	7	241
Total	Planned	113	17.619
	Operating	50	9.412

Source: Ministry of Tourism, Marina Division, 2006.

In respect, finally, of conference tourism, Greece is ranked low in the international tables (22nd in 2005). According to figures from the International Congress and Convention Association, in 2005 5,283 international conferences were held around the world, of which 94 were organized in Greece, twice the number organized here in 1996. Average duration of the delegates' stay was about 4 days and consumption per conference exceeded 2,000 dollars. In 2005 78,347 delegates came to Greece for 94 conferences staged by international associations, bringing revenue of 165m Euro (2.2% of the global total). The infrastructure of organized conference venues is continually expanding in response to the growth and prospects of the sector. This infrastructure is located mainly in hotels, which boast in general remarkably good conference facilities, with an average capacity of 500-1,500 persons, while independent, organized conference venues are fewer in number.

TABLE 25: TOTAL NUMBER OF INTERNATIONAL CONFERENCES BY COUNTRY

Position	Country	1996	1999	2002	2003	2004	2005
1	USA	360	396	444	445	435	376
2	Germany	199	254	267	264	323	320
3	Spain	139	185	265	273	304	275
4	UK	203	248	258	271	242	270
5	France	196	220	217	218	267	240
10	Switzerland	80	78	141	147	134	151
15	Singapore	33	47	61	78	105	125
20	Hungary	89	64	76	75	94	97
21	China	49	44	41	40	89	95
22	Greece	44	69	103	78	99	94
23	Belgium	75	67	101	79	99	92
28	Turkey	29	41	46	53	59	68

Source : International Congress and Convention Association, 2006

Growth in number of tourist beds

The period 1990-2005 in Greece saw a continual expansion in tourist reception infrastructure. Thus the number of beds available in 2005 in all kinds of hotel accommodation (except camping sites) amounted to 682,050¹². This figure was up 12.36% on 2000, while the average recorded rate of growth over the period 1990-2005 was in the order of 3%. The holding of the Olympic Games in Greece made a substantial contribution to increasing the number of beds during this period. In respect of the country's share in the total hotel capacity of the EU countries, measured in bed numbers, Eurostat figures for the latest year available (2004) show a slight increase in the Greek share from 6.08% in 1995 to 6.20% in 2004. In addition to these hotel beds, Greece also has about 600,000 beds in rented rooms. Places at organized campsites numbered 92,677 in 2004, down by 3.29% on 2000.

The table below shows changes in number of foreign tourist arrivals and in hotel bed numbers in Greece and its main competitors over the period 1990-2000. It shows an impressive increase in tourist accommodation infrastructure in Turkey and Egypt. Turkey now approaches the same capacity as Greece, while its growing popularity is also seen in arrival numbers, which had already exceeded Greek levels by 2004¹³.

¹² Nat. Stat. Office, Tourism Statistics, 2005.

¹³ In the Reports of the WTO it is estimated that in Greece tourist arrivals numbered about 14m in Greece and about 16.8m in Turkey.

TABLE 26: ARRIVALS/BEDS

YEAR	SPAIN		TURKEY		CYPRUS		PORTUGAL		EGYPT		GREECE	
	Arrivals	Beds	Arrivals	Beds	Arrivals	Beds	Arrivals	Beds	Arrivals	Beds	Arrivals	Beds
1990	37.441	929.533	4.799	164.980	1.561	51.774	8.020	179.337	2.411	101.469	8.873	438.355
1991	38.539	972.808	5.158	192.386	1.385	56.859	8.657	188.501	2.112	105.690	8.036	459.297
1992	39.638	998.816	6.549	212.902	1.991	62.986	8.884	190.892	2.944	109.820	9.331	475.799
1993	40.085	1.009.241	5.904	228.641	1.841	67.494	8.434	198.862	2.291	116.531	9.413	486.439
1994	43.232	1.132.350	6.033	258.580	2.069	74.846	9.169	202.442	2.356	120.854	10.642	508.505
1995	34.920	1.074.017	7.083	280.463	2.100	77.259	9.511	204.051	2.871	128.957	10.130	533.812
1996	36.221	1.087.529	7.966	301.524	1.950	83.537	9.730	208.205	3.528	140.741	9.233	548.785
1997	39.553	1.102.424	9.040	313.298	2.088	83.288	10.172	211.315	3.656	150.986	10.070	561.068
1998	43.396	1.121.217	8.960	314.215	2.223	85.161	11.295	215.572	3.213	166.817	10.916	576.876
1999	46.776	1.282.013	6.893	319.313	2.434	84.173	11.632	216.828	4.490	187.284	12.164	584.973
2000	48.201	1.215.290	10.428	404.300	2.686	85.303	12.096	222.958	5.506	213.898	13.096	593.990
change 00/90	28,74%	30,74%	117,30%	145,06%	72,07%	64,76%	50,82%	24,32%	128,37%	110,80%	47,59%	35,50%
Average annual rate of change 00/90	2,56%	2,72%	8,07%	9,38%	5,58%	5,12%	4,19%	2,20%	8,61%	7,74%	3,97%	3,08%

Sources: Andersen (2002), Nat. Statistics Office/Hellenic Tourism Organization (2003), WTO (2002), Association of Spanish Hoteliers (2002), TYD (2002), KOT (2002), General Portuguese Tourism Directorate (2002), Association of Egyptian Hoteliers (2002), Greek Hotels Association (2002). Arrivals (in 1000's) refer to the total number of foreign arrivals in the country.

Average size of hotel units

The most recent statistics (National Statistics Office, Tourism Statistics, 2005) show the average size of Greek hotel unit as 75 beds, compared with a EU figure of 54. The average for five star hotels is 367 beds, for four star hotels 183 beds, for three star hotels 93 beds and for two star hotels 52 beds:

TABLE 27: AVERAGE UNIT SIZE

Category	Average hotel size in bed number					
	SPAIN	TURKEY	CYPRUS	PORTUGAL	EGYPT	GREECE ¹⁴
5*	355	607	456	482	347	435
4*	318	283	239	277	301	189
3*	218	170	116	155	187	97
2*	77	86	66	108	102	52
1*	49	88	47	78	73	62 ¹⁵
TOTAL	156	185	146	204	217	74

Sources: Association of Spanish Hoteliers (2002), TYD (2002), KOT (2002), General Portuguese Tourism Directorate (2002), Association of Egyptian Hoteliers (2002), Greek Hotels Association (2002).

¹⁴ The classes of hotel in Greece were matched on the basis of the correspondence recently adopted for ranking hotels on the star system.

¹⁵ D and E class hotels included.

It should be noted that in the countries competing directly with Greece the average size of hotel is much larger – in all categories.

Hotel occupancy rates by month (2004)

For the last year for which figures are available (2005) occupancy of hotels (not campsites) increased by three percentage points, rising to 58.6% for the whole year¹⁶. The highest occupancy rates were achieved in Crete, the Ionian Islands (both at 78.5%) and the Southern Aegean (73.5%). The lowest rates were recorded in hotels in W. Macedonia (33.1%) and Central Greece (36.1%). The levels of occupancy by month reflect the very seasonal nature of tourism in Greece. The peak months are from June to September, with demand culminating in August, when occupancy exceeds 80%¹⁷. In May and October occupancy is around 50%, and in the other months of the year about 30%.

Tourist preference indicates that Greece is seen on the international tourism market as a summer vacation destination. The result of this seasonal structure of demand is that hotels are only operational during certain months of the year. Most Greek hotels – 72% - work only in the main season, while 25% operate for seven months a year and 20% for six months. On average, a Greek hotel will be open just 7.5 months a year, corresponding exactly to the April-October season of peak foreign demand.

Employment

According to Eurostat figures (Labour Force Survey, 2005) some 304,000 people in Greece are employed every year in the hotel and restaurant sector (6.9% of the country's total employment). The number of persons employed in the sector represents 3.7% of total employment in the sector in the EU-24 (there are no figures available for Luxembourg), when the share of the total labour force of the country is 2.2%. Type of employment in the sector is distributed as follows: 58.6% work as salaried employees, 31.2% as self-employed and 10.2% as family members working in family businesses. 92.8% of those employed in the sector are in full-time work, the remaining 7.2% are employed part-time. We must also include those employed in sectors indirectly related with tourist activities. A study by the Association of Greek Tourist Businesses (SETE) in 2003 calculating indirect employment for the year 2000 yielded the following results:

¹⁶ Source: Nat. Stat. Office, Press Release 5/7/2006.

¹⁷ Source : Nat. Stat. Office, Tourism Statistics, 2004

TABLE 28: EMPLOYMENT IN TOURISM

Direct Full Employment	Hotel accommodation	96.759
	Ancillary accommodation	24.895
	Businessmen in accommodation sector	49.711
	Agencies	19.305
	Road transport	7.462
	Air transport	12.136
	Sea transport	9.600
	Other tourist businesses	35.440
	Total Direct Full Employment (DFE)	255.308
Direct Part-Time Employment (DPTE)	=DFE * 35%	89.358
Indirect Employment (IE)	IE / DFE=1/ 0,55	464.196
Grand Total	DFE+DPTE+IE	808.862

Source: SETE, 2003

Taking these figures in combination with the Eurostat statistics for 2005 it can be estimated that the labour force related directly or indirectly to the tourist sector amounts to about 850,000 persons. However, since many of these jobs are only seasonal, one might say that the total figure of full time jobs associated with tourism in Greece amounts to 700,000. In relation to the year 2000 the number of those employed in the sector is up by 11.36%, although as a percentage of the total workforce the level has not changed significantly. However, there has been a significant change in relation to the figure for 1993, when those employed in the sector represented 5.46% of the total economically active population. Since then more employment has been oriented towards the sector, which showed an average rate of increase of 3.42% over the period 1993-2005. Those employed in the sector are for the most part young people aged up to 35 (46.05%), followed by the age group 35-44 at 25%.¹⁸ This phenomenon might be explained by the fact that tourism is an intensely seasonal activity which favours part time employment, as well as the fact that the qualifications required are slight for most of the jobs available. These characteristics of the labour market in this sector are more suitable to younger age groups, with little experience and training, seeking occasional employment. These assertions are confirmed by an examination of the educational level of those employed in the sector, the majority of whom have only completed primary or secondary education, at levels significantly greater than that of the economy as a whole, while the percentage of graduates of higher education is only a third of the figure for the economy as a whole. It is evident that the tourist industry tends to employ people with an average or low level of education, clearly not as skilled as the labour force over the full range of economic activities. Just 6.91% of those employed in the tourist industry have attended institutions of higher education, compared with a figure of 23.57% across the economy as a whole.

¹⁸ Source : Eurostat, 2004.

Tourist movement (arrivals – overnight stays)

During the period 1990-2000 there were sustained positive rates of change in tourist movement. However, these trends were reversed in the period 2000-04, with a contraction in the movement of tourists. Specifically, arrivals of foreign tourists at hotels and related accommodation in 2004 were 6,313,228, a decline of 18.72% over the 2000 figure. Over the same period the same trends were seen in domestic tourist movement, but at lesser intensity. Domestic arrivals at hotels and related accommodation in 2004 numbered 5,567,107, a fall of 4.62% from the 2000 figure. Thus the total number of arrivals in 2004 was 11,880,335, a fall of 12.67% since 2000. Over the same period the total arrival number for the EU as a whole increased by 3.37%¹⁹. Our country's share of the EU-24 (no figures available for Ireland) total of foreigner arrivals at hotels and related accommodation was 3.39%.

TABLE 29 GREECE-EU COMPARISONS, 2004

	Greece	EU24 ²⁰
Arrivals	6.313.228	186.320.608
Overnight stays	38.309.783	612.847.491
Average length of stay	6	3

Source: Eurostat Database, 2006. Processed by Support Consultant

According to National Statistics Office figures, there was a significant positive change in arrivals of tourists at all kinds of accommodation, excluding campsites, in 2005. Tourist arrivals numbered 13,075,771, a rise of about 10.06% over the preceding year. In respect of the number of overnight stays, the trends seen in arrival numbers are, as expected, mirrored here. Overnight stays by foreigners at hotels and related accommodation in 2004 amounted to 38,309,783, down by 17.10% over the figure for 2000. At the same time overnight stays by Greeks at hotels and related accommodation in the same year numbered 13,280,010, a fall of 9.21% from the 2000 figure. Total overnight stays for 2004 numbered 51,589,793, representing 3.72% of total overnight stays across the EU. In 2005 overnight stays followed the trend shown by arrivals, with an increase of 4.71% bringing the total to 54,017,256. The largest number of foreign tourists arriving at hotels and related accommodation in 2005 were from Germany (16.1%). They were followed by Britons at 14.9% and then Italians at 8.6%. Other significant countries of origin for visitors to Greece were France (8.5%), the USA (8.1%), the Scandinavian countries (Sweden, Norway, Finland, Denmark at 7.1%), and Holland (4.0%). In respect of overnight stays, again the largest group were the Germans, at 22.7% of the total, followed by Britons at 19.0%, Scandinavians at 8.8%, Italians 7.3%, French 6.7%, Dutch 5.1% and Austrians 3.6%. Most tourists prefer the Greek islands; in 2005 70.9% of all overnight stays by all kinds of tourists in collective accommodation were in island Prefectures (Aegean, Crete and Ionian Islands). Crete attracted the largest share, with 28.3%. This preference for the islands can be attributed to the way in which the Greek tourist product is marketed, with promotions relying heavily on the natural beauty of the Greek islands. Attica also takes a significant share (9.8%), attracting tourists not only through its natural beauties, but also through the wider cultural and economic activities located in the capital.

¹⁹ This figure refers to 23 states and does not include Ireland and Malta, for which no figures were available.

²⁰ Not including Ireland.

TABLE 30: OVERNIGHT STAYS BY FOREIGNERS BY REGION, 2005

Region	Hotels and similar accommodation	Campsites and other collective accommodation	Total
E. Macedonia-Thrace	456.756	35.544	492.300
C. Macedonia	2.900.877	70.588	2.971.465
W. Macedonia	42.885	0	42.885
Thessaly	684.338	29.525	713.863
Epirus	145.116	43.467	188.583
Ionian Islands	5.966.265	84.791	6.051.056
W. Greece	538.643	63.365	602.008
C. Greece	492.085	41.188	533.273
Peloponnese	1.033.282	207.959	1.241.241
Attica	3.957.594	47.834	4.005.428
N. Aegean	1.049.214	0	1.049.214
S. Aegean	11.278.295	30.505	11.308.800
Crete	11.529.448	4.790	11.534.238
Total	40.074.798	659.556	40.734.354

Source: National Statistics Office, Press Release 5/7/2006.

A significant observation to be made from study of the above figures is that even in the year of the Athens Olympics the number of arrivals to Greece from abroad declined, even though globally 2004 was, according to the World Tourism Organization, the best year for tourism (with an increase of about 10% over the previous year). Because of the Olympics high occupancy rates were of course recorded in the area of the capital, and – to a lesser extent – in Thessaloniki, which the sector's businessmen were able to exploit to generate higher profits than in other years. However, the situation was different elsewhere in the country, with a more than 5% fall in the number of overnight stays, despite the fact that prices of accommodation were not adjusted upwards by the full rate of inflation but were in some cases actually reduced, as reported in the May 2005 report by the Institute for Tourist Research and Predictions. Nevertheless, according to figures released by the World Tourism Organization, in 2004 total currency revenue into Greece from tourism amounted to 10,347.8 million Euro, an increase of 9.0% over the previous year. This type of contrast highlights the opportunistic approach taken by the country's tourist sector.

The declining competitiveness of the Greek tourist industry is due to many factors. One of these is the country's entrance into the Eurozone which, because of the strong exchange rate of the Euro, has made the country less attractive than its rivals in the Mediterranean which are linked more closely to the dollar – Turkey, N. Africa, Malta. Yet the adoption of the Euro is not the decisive factor in the country's loss of competitiveness in the tourism market. Greece is ranked 16th in the table of most popular tourist destinations, with a market share of 2.03% for 2003²¹. The five top places for arrivals of foreign tourists were held in 2004 by France (9.8%), Spain (7.0%), the USA (6.0%), China (5.5%) and Italy (4.9%). In general terms Greece's direct rivals – with the possible exception of Italy – performed very well indeed over the period 2000-2004.

From the 2005 figures referred to above it would seem that in this year there was an upturn in tourist movement. This had much to do with intensive efforts by the state to promote and market the Greek tourist product, both here and abroad. However, the same year saw an

²¹ Source: WTO, 2005.

impressive increase in arrivals in our neighbour, Turkey, approaching 20.4%, continuing to take a dramatically increasing share of the tourist services market in southern Europe and the Mediterranean²². As for forecasts for the current year, the UNWTO World Tourism Barometer asserts that despite lack of movement in the area of income from tourism, Greece continues to reap the benefits from the successful organization of the Athens Olympics in 2004. During the first quarter of the year the number of conferences planned was significantly higher than for the same period in 2005. The Institute for Tourism Research and Prediction (ITEP) forecasts that arrivals in Greece in 2006 will be up by 8% to 10%. However, foreign currency earnings are expected to be adversely affected by the widespread use of the all inclusive package system, and by the trend for the average length of stay to decline.

Income from tourism

It has been demonstrated that cost is the most important determining factor in the choice of Greece as a destination, especially when the purpose of the trip is leisure and entertainment. In Greece the period 1990-2000 saw an increase in average consumer spending per arrival of 240% over the level for 1990²³. Over the same period there was a convergence in the level of average consumer spending in all the competing countries, around the level of \$700 US per arrival, the only exception being Portugal, where levels were significantly lower. According to Bank of Greece figures, tourism earnings for 2005 amounted to 11,037m €, up 6.7% on the previous year. Bearing in mind the number of foreign tourist arrivals in the same year, the average spending per foreign tourist was 767.03 €, up 1.3% over 2004.

Qualitative characteristics

The country's strengths as a tourist destination have not changed. The bulk of visitors on whom the tourist industry rests come to Greece for its geo-climatic attractions (sun, sea, environment), and the hospitality and genuine nature of its people. Tourists come, in other words, to spend summer holidays by the sea or on an island, and they tend to come on some sort of organized package. Most of the supply side of the Greek industry is geared to this kind of demand, whereas very little effort has yet been made to meet demand for new and special forms of tourism; this entails the risk that Greece will be supplanted as a destination by other countries. Differentiated, supplementary tourist products (rural tourism, winter tourism, conference and medical tourism, etc.) have only appeared in the last few years and not yet significantly affected the overall tourist product.

Most tourism businesses are small or medium-sized and unable to exploit economies of scale; they tend to have traditional organizational structures and find it difficult to adapt to new technologies; they tend to be staffed by persons with a low level of education or inadequate business experience. The small size of many businesses prevents both reduction of costs and improvement of services.

A significant plus for the sector has been the increased share of domestic tourism in recent years, allowing further development and greater spread of demand outside peak seasons. On the other hand the significant fall in the share taken by American tourists, especially since 9/11, has led to a fall in high-income tourism and a need to seek new markets.

One key characteristic of the sector is the high geographical concentration of tourist infrastructure in specific regions of the country, mainly the islands, which has led to an

²² Figures from UNWTO World Tourism Barometer, Vol. 4, No. 1.

²³ SETE [Association of Greek Tourism Businesses], 2003.

unequal development of those infrastructures. It should be noted, however, that despite the continuing structural problems tourist activity, mainly on the islands and in coastal regions, is a significant source of economic growth, helps to retain the population of the countryside and to stimulate the activity of productive businesses complementing tourism, and more generally to promote endogenous regional development.

In recent years the competitiveness of the Greek tourist sector has had to face major blows, mainly due to increased international competitive pressures. The ability of the Greek economy to differentiate itself and improve its standing in the global market depends on exploitation of the comparative advantages of its cultural heritage and the high quality of its natural environment.

COMMERCE

The commercial sector is one of the country's key areas of economic activity, as shown by the basic economic figures set out in the Annual Report on Greek Commerce 2005, prepared by the National Confederation of Greek Commerce (ESEE).

Employment

The sector of commerce makes a vital contribution to employment in the Greek economy. Over the period 1993-2005 the sector increased its employment by 33.1%, or about 194,700 persons, thus making a contribution in the order of 30% to the overall increase in employment achieved by Greece over the same period. According to the latest figures from the Labour Force Survey of the National Statistics Office, in 2005 the commercial sector employed some 782,200 persons, representing 17.9% of all those employed in the Greek economy and recording a slight increase on the previous year, 2004, when the figure was 17.3%. Retail trade accounts for 65.5% of employment in the sector, and wholesale trade for 19.2%, with trade in and maintenance of vehicles accounting for 15.3%. More than half those working in the sector are waged or salaried employees (52.0%), 28.7% are self-employed, 12.1% are employers and the remaining 7.2% are in ancillary positions. The ratio of men to women in the sector is 60/40, compared with a ratio for overall national employment of 62/38. 26.2% of those employed are young people aged up to 29; the percentage of those employed part-time remains low (3.8%), while 7.4% of the waged and salaried employees are on limited term contracts or working on a temporary basis²⁴.

TABLE 31: EMPLOYMENT IN COMMERCE

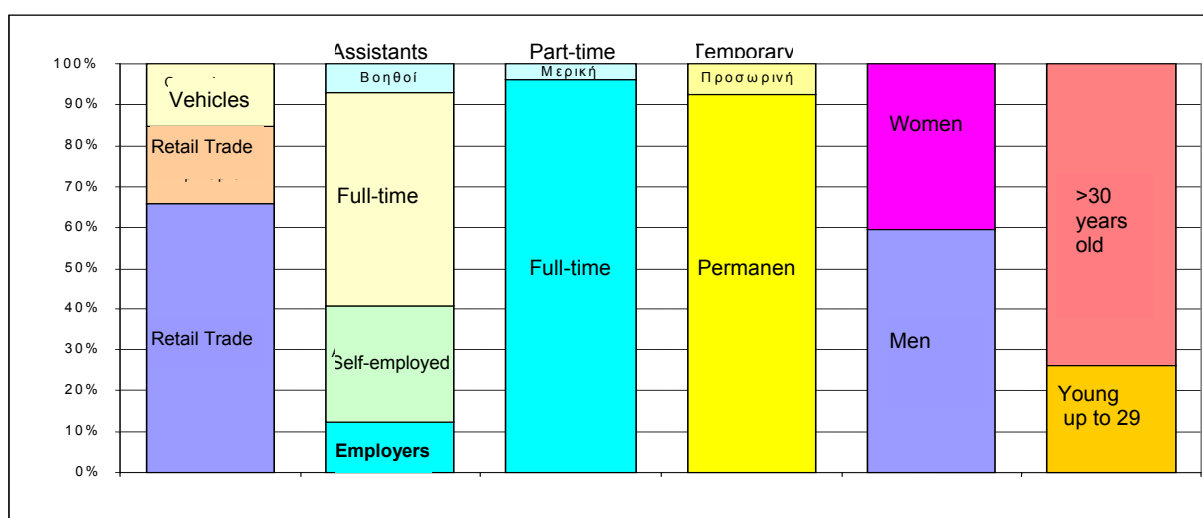
TOTAL EMPLOYMENT						
	ECONOMY	TERTIARY SECTOR	COMMERCE	RETAIL	VEHICLES	WHOLESALE
2000	4.097.875	2.458.900	702.121	456.844	107.598	137.679
2005	4.381.936	2.854.319	782.136	512.593	119.602	149.941
SELF-EMPLOYED						
2000	998.362	468.599	224.031	179.857	26.553	17.621
2005	967.495	499.434	223.889	175.071	29.625	19.192
EMPLOYERS						
2000	326.715	175.737	77.117	44.245	17.411	15.461

²⁴ ESEE: Annual Report on Greek Commerce 2005, Athens 2006.

2005	352.173	211.751	94.968	54.994	19.616	20.357
ON WAGE OR SALARY						
2000	2.378.705	1.695.033	335.230	182.291	54.896	98.043
2005	2.784.761	2.036.107	406.575	236.979	63.874	105.723
ANCILLARY						
2000	394.093	119.531	65.744	50.453	8.738	6.554
2005	277.507	107.027	56.704	45.549	6.487	4.668

Nat. Stat. Office, Labour Force Survey: 1993-1997 Annual, 1998-2005 2nd quarter

DIAGRAM 8: BASIC CHARACTERISTICS OF EMPLOYMENT IN COMMERCE



Source: Nat. Stat. Office Labour Force Survey 2003

The percentage of those in part-time employment (3.8%, or about 30,000 people), remains consistently lower than that in the tertiary sector or in the economy as a whole (4.9% and 4.8% respectively in 2005), for both men and women. Compared with the previous year, part-time employment in the sector rose by about 3,060 persons, mainly women. The percentage of those in temporary employment is 7.4%, (about 30,000 out of a total of 406,575 waged or salaried employees), remaining consistently lower than the same figures for the tertiary sector or the economy as a whole, (12.1% and 12.2% respectively), for both men and women. In 2005 temporary employment in the sector fell from the level in the previous year by about 2,360 persons, of whom about 4/5 were women.

In respect of the characteristics of employment in each area of the sector, more than 1/3 of those employed in retail trade are self-employed (34.2%), 10.7% are employers, 9.0% are assisting, non-paid family members and 46.2% are paid employees. About 49% of those employed are women; young people aged up to 29 make up 26.2% of the employed; the percentage of part-time employment is 4.8%, while temporary employment is estimated to represent 8.5% of paid employment in the sector. In the wholesale trade sector, 70.5% of those employed are paid workers, 12.8% are self-employed, 13.6% are employers and 3.1% are assisting, non-paid family members. About 67% of those employed in the sector are men; young people up to age 29 make up 26.2% of those employed; the percentage of part-time employment is 2.3%, while the percentage of temporary employment is 5.3% of paid

workers in the sector. Finally, in the vehicle trade, maintenance and repair sector 53.4% of those employed are paid workers, 24.8% are self-employed, 16.4% are employers and 5.4% are assisting, non-paid family members. The ratio of men to women is 86/14; young people up to age 29 make up 26.2% of those employed; the percentage of part-time employment is just 1.6%, while the percentage of temporary employment is 6.4% of paid workers in the sector.

As for regional structure of employment in trade, Attica and Central Macedonia are the regions where the bulk of those employed in the commercial sector as a whole are concentrated. Specifically, in the broader region of Attica 40.24% of those employed in commerce are to be found, while 18.2% are to be found in Central Macedonia. Together the two regions have 58.45% of all those employed in the sector, while more than 5% are to be found in the regions of Thessaly, Crete and W. Greece.

TABLE 32: REGIONAL DISTRIBUTION OF EMPLOYMENT IN COMMERCE

REGION	COMMERCIAL SECTOR		TOTAL ECONOMY		% OF COMMERCE/ % OF TOTAL
	EMPLOYMENT	%	EMPLOYMENT	%	
E. MACEDONIA-THRACE	33.988	4,3	229.014	5,2	0,83
C. MACEDONIA	142.462	18,2	732.732	16,7	1,09
W. MACEDONIA	13.996	1,8	97.242	2,2	0,81
EPIRUS	18.579	2,4	122.777	2,8	0,85
THESSALY	48.347	6,2	295.337	6,7	0,92
IONIAN ISLANDS	18.218	2,3	91.853	2,1	1,11
W. GREECE	43.262	5,5	269.306	6,1	0,90
CENTRAL GREECE & EVOIA	37.685	4,8	218.186	5,0	0,97
ATTICA	314.734	40,2	1.628.702	37,2	1,08
PELOPONNESE	33.484	4,3	243.767	5,6	0,77
N. AEGEAN	11.228	1,4	68.671	1,6	0,92
S. AEGEAN	22.611	2,9	123.918	2,8	1,02
CRETE	43.541	5,6	260.432	5,9	0,94
TOTAL	782.136	100,0	4.381.936	100,0	1,00
ATTICA + C. MACEDONIA	457.196	58,5	2.361.434	53,9	1,08
OTHER	324.940	41,5	2.020.502	46,1	0,90

Nat. Stat. Office, Labour Force Survey 2005 (2nd quarter)

Finally, in respect of the characteristics of employment in the commercial sector, the ESEE notes in its Annual Report on Greek Commerce 2005:

- Commercial sociétés anonymes and limited liability companies are estimated to employ 228,900 persons. Companies with a workforce of fewer than ten make up more than half the total. However, 39.8% of total employment is by companies with a staff of over 250. Companies on this scale make up just 1.1% of the total number of companies.
- It is estimated that between 2003 and 2004 employment in the sector rose by 6.0%. The fastest rate of increase was seen in the vehicles and parts sector, followed by retail trade. The increase in employment in wholesale trade was slower than in 2003. Between

2003 and 2004 there was an increase in the concentration of employment in companies with a workforce of over 249 persons, accompanied by slight reductions in companies of other sizes.

- In the commercial sector more than ¼ of those employed are young people aged up to 29 (26.2%). About 16% of jobs created in the sector in 1993-2005 were positions which increased the employment of young people, mainly in the form of full-time employment (87.0%). The part played by young people in the increase in employment in the economy as a whole is in the order of 4.8%, where new full-time jobs account for 60.0% of the change to the total figure. An important characteristic of the sector is the significant role it plays in absorbing the unemployed and economically inactive (21.6% of the total securing work in all sectors of the economy).
- The Greek commercial sector contains 27.0% of all Greek employers, 23.1% of all self-employed and 14.6% of paid workers. Since 1993 the largest decline has been in the number of self-employed persons, contrasting with significant increases in the numbers of paid workers and employers.
- Half of all the non-salaried personnel in the sector (employers, self-employed) are found in Attica and Central Macedonia (Thessaloniki), as well as 2/3 of the paid workers employed in the sector.

Economic results and viability of commercial businesses

Commercial sociétés anonymes and limited liability companies

According to the ESEE Annual Report on Greek Commerce 2005, there are about 8572 sociétés anonymes and limited liability companies active in Greece, the total figures for which are presented in summary form in the table below. In 2004 the rate of increase in sales accelerated for the second successive year. Specifically, following the increase of 6.9% in 2002 and the 8.8% increase in 2003, the turnover of Greece's commercial companies grew in 2004 by 11%, to € 64,932.7m. As in 2003 the increase in sales is due to the new growth in domestic economic activity, facilitated by the favourable conditions in the loan capital markets for financing of business and household spending. The cost of goods sold increased in tandem with sales and reached €51,729.6m. The result of this was that gross profit remained constant at 20.2% or €13,140.6m, 11.1% up on 2003. This rise in gross profits laid the foundations for the new expansion of net results pre-tax, which was, however, slightly lower than the 2003 level of 12.9% .

TABLE 33: BASIC ELEMENTS OF CONSOLIDATED BALANCE SHEET AND OPERATING RESULTS OF COMMERCIAL BUSINESSES (SA AND LLC) 2004, DISTRIBUTION BY SECTOR (€ '000)

Sector Code	SECTOR	BALANCE SHEET							OPERATING RESULTS				
		Number of businesses	Fixed assets (acquisition price)	Assets		Total Assets and Liabilities	Liabilities		Sales	Gross profits	Financial Expenditure	Operating Profits	Net Profits
				Depreciation	Current and Available assets		Own capital	Loan capital (liabilities)					
1	Vehicles	586	1.820.344	549.806	4.393.354	5.663.893	1.019.008	4.644.884	9.885.389	1.374.434	148.253	272.301	275.188
2	Auto spares	290	246.207	95.499	698.078	848.786	232.565	616.221	981.364	249.645	18.441	51.739	57.052
	Trade in vehicles and spares	876	2.066.551	645.305	5.091.433	6.512.679	1.251.574	5.261.105	10.866.753	1.624.079	166.693	324.041	332.239
3	Wholesale trade in agricultural products	146	126.462	46.425	324.922	404.959	109.921	295.038	505.871	82.921	11.443	13.647	15.087
4	Wholesale trade in food, drink, tobacco	914	1.109.705	367.475	2.482.565	3.225.630	807.616	2.418.013	5.283.329	986.797	55.697	135.804	128.210
5	Wholesale trade in clothing, footwear, domestic goods	1.940	2.389.373	991.365	9.537.696	10.941.926	2.718.372	8.223.554	12.653.102	3.419.339	208.355	740.254	745.519
6	Wholesale trade in fuels and chemicals	381	1.636.293	666.044	2.130.510	3.100.758	995.962	2.104.797	9.088.334	993.887	52.356	180.231	204.594
7	Wholesale trade in other intermediate products	974	1.596.166	398.482	2.958.066	4.155.961	1.507.739	2.648.222	3.906.172	769.025	87.312	209.768	221.734
8	Wholesale trade in machinery and equipment	1.370	2.209.399	730.364	4.577.985	6.057.047	1.834.272	4.222.775	7.156.184	1.523.574	111.214	350.522	356.583
9	Other wholesale trade	381	511.401	223.575	768.494	1.056.406	302.422	753.984	1.678.994	291.076	17.305	48.362	47.186
	Wholesale trade	6.106	9.578.800	3.423.731	22.780.237	28.942.687	8.276.304	20.666.383	40.271.986	8.066.618	543.682	1.678.588	1.718.914
10	General retail trade	190	3.275.225	1.027.090	1.894.431	4.142.566	1.161.469	2.981.096	8.577.267	1.888.441	22.147	230.509	230.275
11	Retail trade in food, drink, tobacco	75	41.085	13.302	35.895	63.690	17.626	46.064	99.727	22.192	1.452	1.688	1.506
12	Retail trade in clothing, footwear and domestic goods	497	850.147	349.972	1.062.949	1.563.198	365.691	1.197.507	1.824.595	690.650	26.855	80.985	79.792
13	Retail trade in household appliances	297	721.669	212.400	1.022.218	1.531.487	372.284	1.159.203	1.554.489	422.879	52.060	-4.571	-4.296
14	Retail trade in computers, office machinery; Other retail trade	531	612.242	230.892	912.393	1.293.758	372.914	920.845	1.737.925	425.770	25.143	80.550	78.137
	Retail trade	1.590	5.500.368	1.833.657	4.927.886	8.594.699	2.289.983	6.304.715	13.794.003	3.449.932	127.657	389.163	385.415
	Grand Total	8.572	17.145.719	5.902.692	32.799.556	44.050.064	11.817.861	32.232.203	64.932.741	13.140.629	838.032	2.391.792	2.436.569

The fact that gross profits have risen again, during a year in which there were significant increases in prices of raw materials and commodities, as well as labour, demonstrates that the investment in commerce in 2004 and previous years has increased productivity and safeguarded profits. Another factor which has helped gross profits was the rise of the Euro against the dollar, which moderated or cancelled out the rising cost of imported commodities priced in the foreign currency. We should also not overlook the fact that oligopoly positions have been established in many sectors, which helps to sustain gross margins. The key performance indicators (own and collective, percentages of gross and net profit) of companies with fewer than ten employees lag significantly behind those of companies with more than ten employees.

The most impressive rise in sales (19.9%) was seen in the vehicle and auto parts industry, thanks to the car dealership sector. In the smaller sector, spare parts, however, turnover was static. Also worth noting is the new and dramatic acceleration of the rate of growth in the industry. There was also accelerated growth in the turnover of the wholesale trade sector, but not as impressive as in vehicles and auto parts. Specifically, sales increased by 9.9% in 2004 compared with 7.8% in 2003. Particularly impressive was the rise in sales in the wholesale clothing/footwear/cosmetics/household items sector. By contrast, there was little movement in the wholesale agricultural products and food/drink/tobacco sector. In contrast to the other two sectors, in retail trade the rise in turnover slowed from 9.4% in 2003 to 8.0% in 2004, but remained healthy nevertheless. In general retail trade (supermarkets-department stores) the slowdown was from 9.1% to 6.3%, and in clothing/footwear/cosmetics/household items it was even more significant. However, there was significant acceleration of growth in the household appliance sector, despite the profitability problems faced by some major businesses.

Growth in assets accelerated to 11.2%. Of particular interest was the rapid growth in net assets, both in respect of current and liquid assets. The substantial rise in fixed assets indicates, of course, the significant consolidation of fixed capital in trade through serious investments. However, it does to some extent reflect the adjustment in accounting values of land and buildings made by many companies in 2004. In the financing of capital accumulation a particularly important role was played by own capital, especially capital generated endogenously. Specifically, the own capital of commercial SAs and LLCs grew by 14.2% while overall debt increased by 10.1%. The more rapid increase in growth of own rather than loan capital resulted in a decline in burden of borrowing from 73.9% to 73.2%. It should be noted that the increase in reserves played a more important part in the increased role of self-financing than new share capital. 33.9% of the increase in assets was funded by own capital, and 66.1% by borrowing. This picture is very different from the situation in 2003, when 81.0% of the increase was funded by borrowing. There is no doubt that the improved profitability seen in 2004 has facilitated self-financing.

Rates of return on own capital in Greek SAs and LLCs fell slightly from 21.5% in 2003 to 20.6% in 2004, following the significant rise seen in 2003. This decline was not the result of a fall in the percentage of net profit, which remained constant at 3.8%. The decline in rate of return in 2004 is exclusively due to an increase in the participation of own capital in the funding of commerce. All three trade sectors were profitable. The largest increase (16.2%) was seen in the net results for the vehicles and auto parts sector, which amounted to € 332.2m. In wholesale trade, which again enjoyed the lion's share of the net result, profits were up by 12.3%. On the contrary, the net result in retail trade fell by 4.7% to € 384.4m. The sectors mainly responsible for this deterioration were general retail trade (supermarkets and department stores), clothing/footwear/cosmetics/household items, and household appliances, which once again made losses in 2004. It was the only sector in the whole commercial field which recorded even marginal negative results. The main player in fixed

capital formation was the retail trade sector. Its gross fixed capital formation more than trebled. A major role here was played by the general retail trade sector (supermarkets and department stores), followed by the vehicle and auto parts sector, with vehicles taking the lead. Its gross fixed capital formation was more than double that of 2003. The wholesale trade sector once again made the largest investments, but their rate of growth was clearly lower than that of the other two sectors. The sector which stood out was wholesale trade in clothing/footwear/domestic items.

TABLE 34: REGIONAL DISTRIBUTION (HEAD OFFICES) OF COMMERCIAL SA AND LLC

REGION	NO. OF COMPANIES	%
E. MACEDONIA-THRACE	172	2,0
C. MACEDONIA	1.244	14,5
W. MACEDONIA	74	0,9
EPIRUS	104	1,2
THESSALY	224	2,6
IONIAN ISLANDS	123	1,4
W. GREECE	247	2,9
CENTRAL GREECE AND EVOIA	150	1,7
ATTICA	5.454	63,6
PELOPONNESE	155	1,8
N. AEGEAN	72	0,8
S. AEGEAN	227	2,6
CRETE	326	3,8

ICAP DATABANK

The distribution of commercial companies, on the basis of the region where their registered office is located, reveals a heavy concentration of administrative activities in Attica. Specifically, 63.6% of businesses choose this region for their head office, even though this region's share of national population is much lower (35.6%). The concentration of companies in C. Macedonia (14.5%) is more in tune with the share of the national population located here (17.3%). The failure of the other 11 regions to attract company headquarters is to be seen in the fact that although 52.9% of the national population live in these regions, only 21.9% of companies choose to locate their head offices there. The two regions attracting most company headquarters are followed by Crete, which attracts 3.8% of choices, and then some distance behind, by W. Greece, S. Aegean and Thessaly.

Commercial personal businesses and partnerships

SAs and LLCs represent only a small part of Greek commerce; analysis of trends in this key sector of the economy cannot be based solely on these companies while ignoring other legal forms of business. The National Statistics Office register of businesses shows that SAs and LLCs accounted for only 5.2% of all businesses in 2002. The overwhelming majority, 81.8%, of the 307,324 businesses in the sector were personal, one-man concerns, with partnerships of various kinds (OE, EE) accounting for 12.2% of the total. It is obvious, then, that personal

etc.²⁵ businesses play a huge part in forming the overall picture of trends in trade. However, there is a difficulty here in that these small businesses are not obliged to publish their financial results. In order to form an idea of trends in the basic financial performance of personal businesses, partnerships, etc., in 2005 the ESEE carried out a survey of 1,038 companies, using the method of random, proportional analysis, with findings stratified in respect of geographical position and sector in which the sample was taken. At the same time a comparison was conducted of the results of the research with the published figures for SAs and LLCs for the year 2004. The main findings of the survey were as follows:²⁶

- During 2004 personal businesses and partnerships continued to follow a different trend from that of SAs and LLCs. Their sales and profits were less positive than those of SAs and LLCs. More than 45% of personal businesses reported that in 2004 their sales, gross and net profits had been unchanged. In all sectors there was a rise in the percentage of businesses with stagnating sales, gross and net profits. The highest percentages were found in the vehicle trade sector.
- During the same year personal businesses based in the provinces continued to perform better than those in the major urban centres of Athens, Piraeus and Thessaloniki – 50% of which enjoyed no improvement in sales.
- Despite unfavourable trends in their results, the share of personal etc. commercial businesses which did not carry out any investment declined from 65.6% in 2003 to 56.4% in 2004. Retail trade was the sector in which, in 2004, the highest percentage of businesses failed to make any investment. There was a high level of differentiation in investment behaviour assessed by geographical criteria: 60% of businesses in the provinces made no investment, while the figure for commercial businesses in the major urban centres was 50%.
- A high number (44.2%) of personal businesses continued, in 2004, to have no liabilities to banks, while the corresponding figure for SAs and LLCs was 26.9%. 50% of personal etc. businesses based in Athens/Piraeus/Thessaloniki had no liabilities to banks in 2004, while the corresponding figure for businesses elsewhere in Greece was significantly lower at 38.6%.
- Credit policy of personal businesses was restrained. Most of them kept customer credit at the same level, or reduced it. A higher percentage of businesses in the 'centre' (41.7%) kept credit at the same level, compared with 35.5% elsewhere in Greece. The picture was different for SAs and LLCs.
- Unchanged levels of liquidity were reported for about 50% of personal etc. commercial businesses.
- A higher proportion of wholesale trade businesses improved their results, compared with businesses in retail trade and vehicle dealers. Increases in sales in 2004 were 30%, 20.4% and 21.8% respectively.
- In respect of the provenance of the goods sold on the Greek market by commercial personal businesses and partnerships, 39.5% were produced domestically, 34.1% imported from EU countries and 26.4% imported from elsewhere. The distribution of supply shows no essential differentiation among businesses based in Athens/Piraeus/Thessaloniki and those elsewhere in Greece.

²⁵ The term 'personal etc. businesses' will be used to describe personal businesses as well as partnerships of various forms (OE,EE).

²⁶ ESEE: Annual Report on Greek Commerce 2005, Athens 2006.

DIAGRAM 9: CHANGES IN LEVELS OF SALES BY COMMERCIAL PARTNERSHIP BUSINESSES, 2002-4

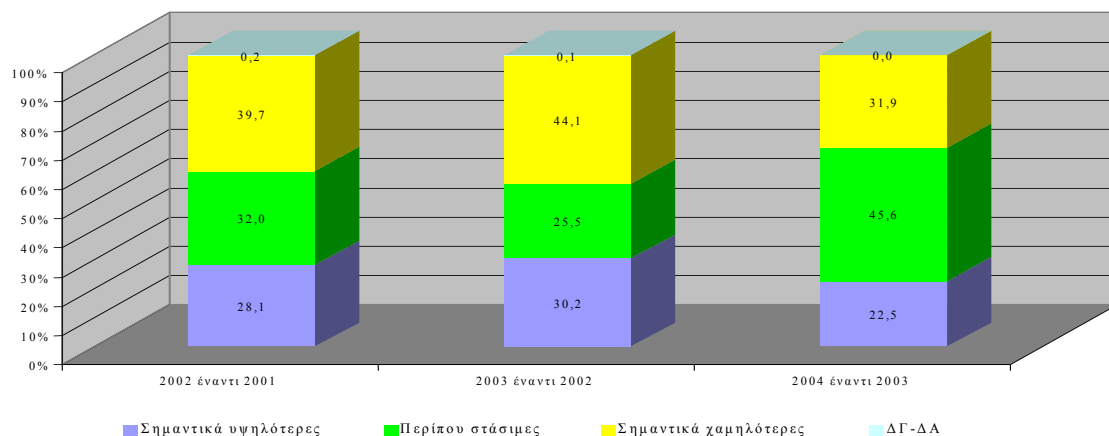
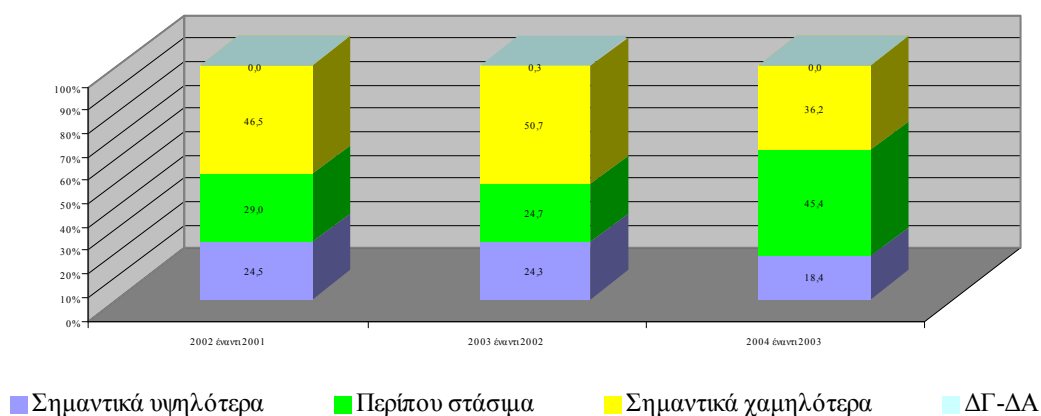


DIAGRAM 10: CHANGES IN PRE-TAX PROFITS OF COMMERCIAL PARTNERSHIP BUSINESSES, 2002-4



Source: ESEE: Annual report on Greek Commerce 2005, Athens 2006

CULTURE

Greece's culture is one of its comparative advantages. It is one of the most important aspects of the country in terms of its international image, and must be exploited if the Greek economy is to grow. At the same time, it is a means by which Greece's profile can be raised in Europe and elsewhere. The Olympics and Paralympics have shown the potential of the cultural sector in assisting growth and creating jobs.

The table below shows visitor figures for the country's museums and monuments

	2000	2001	2002	2003	2004	2005
MUSEUMS	2.061.887	1.886.236	2.687.649	1.759.647	2.501.967	2.692.128
ARCHAEOLOGICAL SITES	6.416.439	6.218.029	6.674.810	6.155.328	5.788.289	6.893.546
TOTAL	8.478.326	8.104.265	9.362.459	7.914.975	8.290.256	9.585.674

Source: Archaeological Resources and Expropriations Fund – National Office of Statistics

A structural feature of visitor behaviour in Greece is the fact that far more people visit the country's archaeological sites than its museums. This is not only to be ascribed to the more general and internationally acknowledged fall in museum visitor numbers, mainly due to the public's 'fatigue' with the exhibits on display (permanent exhibitions which have remained unchanged for many years and which show no understanding of the principles of modern museum management, lack of temporary exhibitions, etc.). It is also due to the fact that Greece's archaeological sites offer a unique opportunity to feel closer to the past, presenting as they do genuine ancient buildings in their natural environment. For this reason the greater popularity of the archaeological sites is irreversible. Realistically we can aspire to reverse the decline in museum visitor numbers, while also making the archaeological sites even more attractive. The results set out in the next table show that, leaving aside temporary fluctuations, things are now moving in the right direction, thanks to the interventions already implemented. It is significant that in the first seven months of 2006 there was an increase in visitor numbers in the order of 11%, compared with the corresponding period of 2005, as the table shows.

	2005 (up to 31/7)	2006 (up to 31/7)	% INCREASE
MUSEUMS	1.434.870	1.586.962	10,6%
ARCHAEOLOGICAL SITES	3.591.318	3.974.512	10,7%
TOTAL	5.026.188	5.561.474	10,6%

Source: Archaeological Resources and Expropriations Fund – National Office of Statistics

The interventions implemented and continued under the 3rd CSF include the following:

- In the **museum sector**, great progress has been made, with a national network of museums now covering the whole of Greece. The country's most important cities and archaeological sites are now acquiring superb, state-of-the-art museum infrastructures, both in terms of buildings and new exhibitions.
- In the **monument sector**, much has been done to meet needs for consolidation, conservation and restoration of the country's most important monuments, although the work completed at these locations is usually not definitive, since many monuments require continual care and attention. Thus the overall programme of protection and

showcasing of Greece's monuments and archaeological sites requires significant further effort, which in turn requires assistance and support.

- At the same time, **new cultural institutions** have been established (for example, the International Book Fair), and others are currently being prepared and promoted (e.g. Visual Arts Biennale), which will attract more visitors and create new jobs.

The momentum which has developed highlights the close relationship between culture and tourism – especially high-quality tourism. Recent research has shown that the most attractive destinations for conference or incentive trips were Athens, Crete and Rhodes – precisely those locations with significant historical interest and a wealth of ancient monuments. These three locations attract 56% of visitors to archaeological sites and 35% of visitors to museums. In respect of the contemporary urban landscape, we must emphasize the positive results of the unification of the archaeological sites in Athens and the showcasing of the mediaeval city of Rhodes. The unification project has highlighted archaeological sites and monuments, while listed buildings have been restored to their proper place within the surrounding urban fabric. The project has also involved the creation of open, public spaces around the archaeological sites, providing an environment for walking, cultural and leisure activities. Contemporary cultural projects have contributed in planning terms to the development of areas chosen by the authorities for urban expansion, and to the regeneration of run-down areas within the existing urban fabric, thereby serving as tools for the remodelling of the city.

There are many areas of the country whose economic growth is dependent to a great extent on the activity of their archaeological sites and museums. Efforts to promote and protect monuments in these areas must continue. At the same time, the number of such areas must be increased by showcasing and promoting new sites and opening new museums.

ANNEX 2 :
SPECIAL OBJECTIVES BY SECTOR

The general objectives of the Programme are broken down into more specific objectives for the various individual intervention areas, as follows:

Processing

In the processing sector the special objectives of the strategy are more narrowly defined as follows:

- ✓ Creation of a friendly and flexible business and working environment, both to encourage domestic entrepreneurship and to attract international business interest in investments in Greece: this will require ongoing changes to the regulatory framework and effective operation of the various services within the public administration (applying the network rationale)
- ✓ Stimulating outward-oriented attitudes, based on the real competitive advantages of each region, as appropriate to each area and sector of activity
- ✓ Improving the quality of products and services
- ✓ Focus on areas of non-technological innovation, creativity, development of digital technology, telecommunications, IT, the internet and biotechnology
- ✓ Support for and improvement of entrepreneurship, particularly in relation to facilitating the starting up of new businesses and their ability to adapt to changes in the market: pursuing this logic – networked actions to improve adaptability of SMEs and their employees
- ✓ Tackling the problem of the size of productive units; attempts and initiatives to increase scale of production through investments and mergers
- ✓ Promotion of new sectors and products by seeking out and exploiting opportunities, undertaking risks and supporting new initiatives (also in traditional areas and sectors)
- ✓ Upgrading internal organization of businesses
- ✓ Support for business access to funding instruments and institutions, such as Venture Capital, Business Angels, Seed Capital, Guarantees etc.
- ✓ Improving quality of investment in human capital, lifelong learning and entrepreneurship schools
- ✓ Adaptation to new technologies in the workplace, converting non-declared labour into legally safeguarded employment
- ✓ Application of pro-active preventive measures in the labour market; timely identification of needs; guidance and training in the context of individually tailored action plans; provision of social services necessary for the labour market integration of disadvantaged persons
- ✓ Promotion of dynamic and specialized entrepreneurship, with targeted support and institutional restructuring in an effective, regulatory public sector; a more efficient network of tangible and intangible infrastructures and more efficient system of financial mediation
- ✓ Upgrading of processing and accompanying activities for sectors of higher added value.

The existence of a healthy and robust industrial sector is essential if we are to exploit the country's potential for growth. The processing industries of the EU are inherently significant – they provide one fifth of EU production and employ about 34m persons. Moreover, processing is the key to exploiting the new knowledge economy (more than 80% of spending on research and development in the private sector in the EU is directed to the processing sector); it manufactures new, innovative, high-quality products which make up about ¾ of EU

exports; it consists of SMEs (99% of companies and 58% of processing employment); it creates growth and jobs across the whole economy, closely linked with the service sectors and generating demand for services to businesses as well as significant inflows required by the service and primary sectors.

Research and Technology

The basic objective of development strategy in the area of Research and Technology is the promotion of innovation in all sectors as the key to restructuring the Greek economy and transforming it into a knowledge economy, which is in turn the key to real improvement in competitiveness, growth, employment and overall prosperity. This basic objective can be broken down into a number of individual more specific goals, as follows:

- ✓ Support for actions contributing to conversion of knowledge into innovative products, processes and services, the creation of new innovative businesses, assisting of transfer of technology and know-how to businesses, and in particular assisting SMEs to incorporate high-quality R&T into their production processes and final products, and to filling the gap between technological knowledge and the market.
- ✓ Promotion of integrated RTD interventions in sectors/areas of high priority for the Greek economy and Greek society, which will help to restructure industries so that they can manufacture new products and services with higher added value and more friendly to the environment.
- ✓ Support for European, Multilateral and Regional R&T collaborations in implementing RTD projects, in networking and mobility of research personnel.
- ✓ Assisting to achieve the goals of the revised Lisbon Strategy, and more specifically the National Reform Programme.
- ✓ Strengthening demand on the part of SMEs for research, technology and innovation services, and helping them gain access to agencies providing these services
- ✓ Provision of incentives to increase the number of patents, and for commercial exploitation in Greece of patents generated by Greek or foreign researchers/inventors here and/or abroad.
- ✓ Forging closer links between science and the community; strengthening the research and innovation culture, and the business culture more generally.
- ✓ Strengthening domestic research personnel and attracting foreign researchers to Greece.
- ✓ Strengthening R&T infrastructures and activities, the basic criteria being excellence, creation of high added value in the national economy, society and environment and their integration into the European and international context.
- ✓ Securing the maximum possible synergy and complementarity with the corresponding actions on the European level, specifically with the 7th RTD Framework Programme and the new Programme for Competitiveness and Innovation.
- ✓ Promotion of participation by Greek research agencies and businesses in joint RTD actions with other EU countries, whether co-financed or not from the budget of the 7th Framework Programme for RTD and Demonstration and/or by the European Investment Bank, in the context of the coordination of national policies and the creation of the European Space for Research and Innovation.
- ✓ Securing continuity and renewal in relation to the RTD and innovation programmes and actions being implemented in the OP Competitiveness.

Energy

The strategic objectives in the energy sector are more narrowly defined as follows:

- ✓ Security of the energy supply and further limiting of dependence on oil, promoting natural gas and electricity networks, further penetration of renewables in the energy balance, energy-saving and improving energy efficiency
- ✓ Strengthening the country's geostrategic role in the broader region through inclusion in international electricity and natural gas transmission networks and promotion of planned infrastructures
- ✓ Utilization of new technologies and modernization and improvement of safety of energy networks
- ✓ Rational management of natural resources.

Specifically in the natural gas sector:

- ✓ Further penetration of natural gas to as many regions as possible, and increase in consumption in those areas capable of connection
- ✓ Conversion of country into energy channel for transmission of natural gas, while also securing new sources for supply and differentiation of sources.

In the electricity sector the goals are focused on provision of regular supply to areas with high demand by expansion and improvement of the transmission system and distribution network, while also ensuring the system's ability to absorb electrical power generated from environmentally friendly sources.

In the RES and energy-saving sector the Programme will make a substantial contribution to:

- ✓ Meeting 20% of gross consumption of electricity from renewable electricity generation (including major hydroelectric projects) by 2010 (Directive 2001/77/EC)
- ✓ Meeting 5.75% of consumption of transport fuel (on an energy basis) through use of biofuels by 2010 (Directive 2003/30/EC)
- ✓ Achieving average annual savings of energy at point of final use by 1% (Directive 2006/32/EC)
- ✓ Curbing rate of increase in CO₂ and other greenhouse gases by 25% in 2010 in relation to the baseline year 1990.

In the natural resource sector:

- ✓ Rational management of resources and adoption of environmental commitments and requirements in matters of health and safety in the workplace
- ✓ Simplification of procedures at all stages of licence-granting and introduction of new technology and innovation in research and exploitation of natural resources
- ✓ Minimalizing environmental impact of exploitation of inert waste
- ✓ Preparation of comprehensive central and regional studies to enhance knowledge of geological environment (land and underwater) as tools for rational and effective planning for development of activities.

Tourism

The basic development objective of the interventions in the tourism sector during the programme period 2007-13 is to increase demand and achieve general qualitative upgrading of the country's tourist product and services at all levels. This basic objective can be broken down into a number of individual goals, as follows:

- ✓ Exploitation of the natural environment and cultural assets (cultural heritage and contemporary culture) of the country in order to enhance the tourist product.

- ✓ Differentiation of the tourist product through dynamic development of special forms of tourism, in tandem with planned expansion and continual upgrading of tourist activities associated with the traditional 'sun and sea' model.
- ✓ Creation and upgrading of hotel and other tourist infrastructures, including those required for development of special forms of tourism.
- ✓ Upgrading qualifications and skills, as well as the working philosophy of people employed in the tourist industry, which is the primary requirement for the growth of the sector.
- ✓ Enhancing the international image of the country as a safe and appealing tourist destination.
- ✓ Prolonging the tourist season across the country and reducing its concentration in the summer months by increasing numbers of foreign tourists while also stimulating local tourism.
- ✓ Rational settlement of the various planning and land use problems which have long impeded the development of the sector, while promoting legislative and institutional issues required for the dynamic development of all forms of tourism, in the context of environmentally friendly and sustainable development for the country with respect for the natural environment and cultural heritage on the national and local levels.
- ✓ Encouraging innovation measures, using the achievements and tools of the knowledge society, contemporary ICTs and modern financing methods.

Both the basic objective and the special targets set out above also represent objectives of the interventions planned under the OP Competitiveness and Entrepreneurship, apart from the last target which pertains to more general issues of an institutional and legislative character being promoted on another level in cooperation with the competent ministries.

Culture

The central objective in the cultural sector is to improve the appeal of Greece, its regions and cities. The cultural sector can make a direct contribution in this area, both through protection and highlighting of the cultural heritage, which is directly related to preservation of the natural and man-made environment, and through development of contemporary culture. Within this context, and by securing adequate high-quality services, culture can be used as one of the country's comparative advantages in order to develop high-quality medium-spending tourism, alternative-themed forms of tourism and those forms of tourism which will contribute directly to lengthening the country's tourist season.

The above general objective can be broken down into the following individual targets:

- ✓ Strengthening the country's cultural infrastructures (promotion of archaeological sites and monuments, creation of new museums and upgrading of existing museums, development of contemporary cultural infrastructures).
- ✓ Development of high-quality services and institutions, acting in synergy with the development of infrastructures to increase visitor numbers and stimulate demand
- ✓ Mobilization of private investment in the cultural sector

Commerce and Consumer Protection

The basic objective of the development strategy in the sector of commerce and consumer protection is to develop commerce, to ensure healthy competition and increase the outward orientation of commercial businesses, while also ensuring that consumer rights are protected – all key factors in improving competitiveness, growth, employment, standards of living and

general prosperity. This basic objective can be broken down into various individual targets, as follows:

- √ Fostering a favourable business climate by simplifying procedures, limiting red tape and strengthening transparency.
- √ Strengthening the outward orientation of Greek businesses by a dynamic increase in exports and gradual replacement of imports with quality Greek products.
- √ Undertaking actions which will help improve the quality of products and services and create a strong profile for brand-name Greek products and services.
- √ Strengthening audit mechanisms to ensure smooth and competitive functioning of the markets, while also upgrading mechanisms and means for protection of the consumer.
- √ The undertaking of actions which will contribute to reducing the cost of production and provision of services by businesses.
- √ Support for the use of innovations (technological and non-technological) by businesses in trade and services.
- √ Upgrading of existing and creation of new contemporary commercial infrastructures.
- √ Modernization of the framework governing state procurement, introducing electronic procurement and strengthening transparency in this sector.
- √ Creation of new and flexible instruments for financing SMEs.

Undertaking actions to strengthen human resources in the sector.

ANNEX 3 :
ALLOCATION OF EXPENDITURE BY PROJECTS OF
HORIZONTAL CHARACTER

TABLE: Allocation of expenditure by projects of 'Horizontal Character' on basis of share by region of European Council 2005

Exclusively Objective 1 Regions	56,8%
Attica	20,8%
W. Macedonia	3,2%
C. Macedonia	15,2%
C. Greece	3,1%
S. Aegean	0,9%
Total of transition regions	43,2%
Total of regions	100,0%

ANNEX 4 :
QUANTITATIVE DATA FOR TRANSITIONAL SUPPORT
REGIONS IN OP 'COMPETITIVENESS AND
ENTREPRENEURSHIP'

Public spending by General Objective in the OP 'Competitiveness and Entrepreneurship' and in the 5 transitional support regions (for information only)*

(in m. €)

GENERAL OBJECTIVES OP Competitiveness and Entrepreneurship **	OP Competitiveness and Entrepreneurship	C. MACEDONIA	W. MACEDONIA	C. GREECE	ATTICA	S. AEGEAN
Creation and promotion of innovation, supported by assistance for RTD (G.O. 1)	231	160	18	36	213	1
Strengthening entrepreneurship and extroversion (G.O. 2)	548	58	19	124	182	15
Improving the business environment (G.O. 3)	428	70	23	43	155	29
Completion of a viable energy system (G.O. 4)	479	80	15	97	125	35
Total	1.687	368	75	300	675	80

*The amounts in the table pertain to the approval period of the OP, are merely indicative and may change during implementation of the OPs. In all cases the current figures for the 5 transitional regions are those included in the relevant ROPs.

** This column does not contain the amounts pertaining to technical support for action implementation.

Quantified NSRF objectives in the OP 'Competitiveness and Entrepreneurship' and the five transitional support regions (for information only)*

NSRF INDICATORS	OPCE	C. MACEDONIA	W. MACEDONIA	C. GREECE	ATTICA	S. AEGEAN	TOTAL
Number of businesses benefiting from actions for Research and Development of Innovation	280	148	17	35	220		700
Number of Regional Poles of Innovation	3			1			4
Number of new knowledge-intensive businesses receiving support (spin-off and spin-out)	9	7			14		30
Number of businesses to be supported by the programmes	7.629	544	178	1.165	1.705	141	11.362
Number of new jobs to be created by support for businesses	10.244	760	249	1.626	2.380	198	15.457
Number of investment projects in special forms of tourism	17	1	1	3	5		27
Percentage of tourist beds modernized	8%	3%	21%	20%	13%	0.4%	66%
Number of businesses being supported by Support Structures	32.000	3.828	1.256	2.346	8.490	1.580	49.500
Installed electric power from RES and high-performance CHP (MW)	513	102	25	79	56	17	792
Percentage of population with access to natural gas	2.8%	2.5%		1.6%			7%

* The amounts in the table pertain to the approval period of the OP, are merely indicative and may change during implementation of the OPs. In all cases the current figures for the 5 transitional regions are those included in the relevant ROPs.

ANNEX 5 : CORE INDICATORS

In this Annex we present the core indicators pertaining to the present Operational Programme. The indicators in question are set out in Annex 1 of the Working Paper No. 2 of the European Commission titled “Indicative Guidelines on Evaluation Methods: Monitoring and Evaluation Indicators”, as well as in Working Paper No. 7 of the European Commission titled “Indicative Guidelines on Evaluation Methods: Reporting on Core Indicators for the European Regional Development Fund and the Cohesion Fund”.

The core indicators, which are presented by priority axis in paragraph 3.3 of the Programme, are summarized here-after. There are some core indicators that regard more than one priority axis, as it is mentioned at the following table.

An attempt has been made to calculate the baseline values and target values for as many core indicators as possible. For a limited number of indicators contained in the Annex to Working Paper No. 2 and applied in the Programme, it has not been possible in the current phase of planning to calculate values. We hope to fill in these missing values after more precise definition of the corresponding actions and/or after development of the specialist methodology.

Pursuant to the content of Working Papers, the core indicator values will be updated in the annual reports as they are submitted.

CODE	CORE INDICATOR	UNIT OF MEASUREMENT	SOURCE	BASELINE VALUE*	TARGET VALUE 2013 **	DEFINITION-COMMENTS
ΔΕΙΚΤΕΣ CORE						
4	Number of RTD projects	Number	MIN. OF DEVELOPMENT / GSRT	2.276	250	The baseline value concerns the assessment of research projects/sub-projects completed in 2008 within the framework of EPAN in the 13 regions
5	Number of cooperation project enterprises - research laboratories	Number	MIN. OF DEVELOPMENT / GSRT	0	70	Agencies from different regions can participate in such a cooperation project. The value of the indicator for each participant corresponds to the party on the basis of the budget
6	Research jobs created	Number	MIN. OF DEVELOPMENT / GSRT	0	928	Gross jobs (for the RTD sector). Corresponds to full-time employment equivalents.
7	Number of direct investment aid projects to SMEs	Number	MIN. OF DEVELOPMENT	10.670	6,274	The baseline value refers to the end of 2006 and pertains to the number of sub-projects completed within the framework of EPAN in the 13 regions. All the SMEs that will be financed by the actions of P.A 2 contribute to the indicator. Furthermore the SMEs that will participate at the financial engineering instruments of P.A. 3 shall be counted here, as well as the SMEs of P.A. 4 that will be financed through the Investment Law.
8	Number of start-ups supported	Number	MIN. OF DEVELOPMENT	1.800	1,200	Number of projects (Direct support of investments in SMEs) of which: number of start-ups supported. The baseline value refers to the end of 2006 and pertains to the number of sub-projects completed within the framework of EPAN in the 13 regions
9	Jobs created (gross, full time equivalent)	Number	MIN. OF DEVELOPMENT	0	4,200	Number of jobs created (gross, equivalent full-time employment positions) by Direct Support through Investments in SMEs
10	Investment induced (million €)	million €	MIN. OF DEVELOPMENT	0	2,704	This concerns the total Public and Private Expenditure of the Axis (in M. €). The indicator is used by P.A. 2, 3 and 4.
23	Number of renewable energy projects	Number	MIN. OF DEVELOPMENT / Energy sector	58	74	The baseline value refers the estimate of projects completed in 2008 within the framework of OP 'Competitiveness' in the 13 regions (value 58)
24	Additional capacity of renewable energy production	MW	MIN. OF DEVELOPMENT / Energy sector	766	156	Both the baseline value and the target value concern the installed RES power of the 8 regions
30	Reduction of greenhouse emissions (CO ₂ and equivalents, kt)	kt CO ₂	MIN. OF DEVELOPMENT / Energy sector	2.000	1,990	This concerns the annual decrease of greenhouses gas emissions (CO ₂ and equivalents) achieved by the actions of P.A.4. The values (baseline and target) exclusively concern the 8 regions.

CODE	CORE INDICATOR	UNIT OF MEASUREMENT	SOURCE	BASELINE VALUE*	TARGET VALUE 2013 **	DEFINITION-COMMENTS
ΔΕΙΚΤΕΣ CORE						
34	Number of Tourism Projects	Number	MIN. OF DEVELOPMENT	3.545	35	The baseline value concerns the finished projects at the end of 2006, at the 13 regions. At the baseline value it has been counts the state aid projects of the sector, which, according to more recent instructions, do not contribute to the corresponding indicator.
35	Number of jobs created in tourism	Number	MIN. OF DEVELOPMENT	0	135	The jobs created by the infrastructure projects in the Tourism sector contribute to this value

* The baseline value concerns the 13 regions

** The Target value concerns the 'net' target for the 8 Regions of objective 1